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<210> 3850

<211> 257

<212> PRT

<213> Homo sapiens

<400> 3850

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			20					25					30		
Phe	Pro	Phe	Asn	Gln	Trp	Gly	Leu	Gln	Pro	Arg	Ser	Leu	Leu	Leu	Gln
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Ala	Ala	Arg	Gly	Tyr	Val	Val	Arg	Lys	Pro	Ala	Gln	Ser	Arg	Leu	Asp
	50					55					60				
Asp	Asp	Pro	Pro	Pro	Ser	Thr	Leu	Leu	Lys	Asp	Tyr	Gln	Asn	Val	Pro
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Gly	Ile	Glu	Lys	Val	Asp	Asp	Val	Val	Lys	Arg	Leu	Leu	Ser	Leu	Glu
				85					90					95	
Met	Ala	Asn	Lys	Lys	Glu	Met	Leu	Lys	Ile	Lys	Gln	Glu	Gln	Phe	Met
			100					105					110		
Lys	Lys	Ile	Val	Ala	Asn	Pro	Glu	Asp	Thr	Arg	Ser	Leu	Glu	Ala	Arg
		115					120					125			
Ile	Ile	Ala	Leu	Ser	Val	Lys	Ile	Arg	Ser	Tyr	Glu	Glu	His	Leu	Glu
	130					135					140				
Lys	His	Arg	Lys	Asp	Lys	Ala	His	Lys	Arg	Tyr	Leu	Leu	Met	Ser	Ile
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	180		185		190
Pro	Leu Tyr Tyr Arg Arg Ala His Arg Arg Phe Val Thr Lys Lys Ala				
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Leu	Cys Ile Arg Val Phe Gln Glu Thr Gln Lys Leu Lys Lys Arg Arg				
	210		215		220
Arg	Ala Leu Lys Ala Ala Ala Ala Ala Gln Lys Gln Ala Lys Arg Arg				
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Gln

<210> 3851

<211> 1183

<212> DNA

<213> Homo sapiens

<400> 3851

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1080

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actggacaac ctctctcccc aaatatgcct ccagattcac acataaacca caatggaaac
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1183

<210> 3852

<211> 323

<212> PRT

<213> Homo sapiens

<400> 3852

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Val	Leu	Val	Val	Leu	Leu	Val	Val	Ile	Val	Val	Leu	Ala	Phe	Asn	Tyr
			20					25					30		
Trp	Ser	Ile	Ser	Ser	Arg	His	Val	Leu	Leu	Gln	Glu	Glu	Val	Ala	Glu
		35				40						45			
Leu	Gln	Gly	Gln	Val	Gln	Arg	Thr	Glu	Val	Ala	Arg	Gly	Arg	Leu	Glu
	50					55				60					
Lys	Arg	Asn	Ser	Asp	Leu	Leu	Leu	Leu	Val	Asp	Thr	His	Lys	Lys	Gln
65					70					75					80
Ile	Asp	Gln	Lys	Glu	Ala	Asp	Tyr	Gly	Arg	Leu	Ser	Ser	Arg	Leu	Gln
			85					90					95		
Ala	Arg	Glu	Gly	Leu	Gly	Lys	Arg	Cys	Glu	Asp	Asp	Lys	Val	Lys	Leu
			100					105					110		
Gln	Asn	Asn	Ile	Ser	Tyr	Gln	Met	Ala	Asp	Ile	His	His	Leu	Lys	Glu
		115					120					125			
Gln	Leu	Ala	Glu	Leu	Arg	Gln	Glu	Phe	Leu	Arg	Gln	Glu	Asp	Gln	Leu
	130					135					140				
Gln	Asp	Tyr	Arg	Lys	Asn	Asn	Thr	Tyr	Leu	Val	Lys	Arg	Leu	Glu	Tyr
145					150					155					160
Glu	Ser	Phe	Gln	Cys	Gly	Gln	Gln	Met	Lys	Glu	Leu	Arg	Ala	Gln	His
			165					170					175		
Glu	Glu	Asn	Ile	Lys	Lys	Leu	Ala	Asp	Gln	Phe	Leu	Glu	Glu	Gln	Lys
		180						185					190		
Gln	Glu	Thr	Gln	Lys	Ile	Gln	Ser	Asn	Asp	Gly	Lys	Glu	Leu	Asp	Ile
		195					200					205			
Asn	Asn	Gln	Val	Val	Pro	Lys	Asn	Ile	Pro	Lys	Val	Ala	Glu	Asn	Val
	210					215					220				
Ala	Asp	Lys	Asn	Glu	Glu	Pro	Ser	Ser	Asn	His	Ile	Pro	His	Gly	Lys
225				230						235					240
Glu	Gln	Ile	Lys	Arg	Gly	Gly	Asp	Ala	Gly	Met	Pro	Gly	Ile	Glu	Glu
			245					250					255		
Asn	Asp	Leu	Ala	Lys	Val	Asp	Asp	Leu	Pro	Pro	Ala	Leu	Arg	Lys	Pro
		260				265						270			
Pro	Ile	Ser	Val	Ser	Gln	His	Glu	Ser	His	Gln	Ala	Ile	Ser	His	Leu
		275				280						285			
Pro	Thr	Gly	Gln	Pro	Leu	Ser	Pro	Asn	Met	Pro	Pro	Asp	Ser	His	Ile
	290				295					300					
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Leu	His	Ala													

<210> 3853
<211> 375
<212> DNA
<213> Homo sapiens

<400> 3853
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240
gttgatgaaa gaagagactc tcaaattggtg gtagactcct tcaaattctgg ttttgaacct
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375

<210> 3854
<211> 125
<212> PRT
<213> Homo sapiens

<400> 3854
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Gln Ile Tyr Lys Gln Leu Gln Glu Met Asp Glu Arg Arg Thr Ile Lys
35 40 45
Leu Ser Glu Cys Tyr Arg Gly Phe Ala Asp Ser Glu Arg Lys Val Ile
50 55 60
Pro Ile Ile Ser Lys Cys Leu Glu Gly Met Ile Leu Ala Ala Lys Ser
65 70 75 80
Val Asp Glu Arg Arg Asp Ser Gln Met Val Val Asp Ser Phe Lys Ser
85 90 95
Gly Phe Glu Pro Pro Gly Asp Phe Pro Phe Glu Asp Tyr Ser Gln His
100 105 110
Ile Tyr Arg Thr Ile Ser Asp Gly Thr Ile Ser Ala Ser
115 120 125

<210> 3855
<211> 1377
<212> DNA
<213> Homo sapiens

<400> 3855
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120

cagaactgtg gctctggtgt gggtgggata gtggactatg gacctagacc caacaagagt
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 240
 tatgtgggag atggcttctc atgcagtggg aacctgctgc aggtcctgat gtccttcccc
 300
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 360
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 420
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 480
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 720
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<210> 3856

<211> 330

<212> PRT

<213> Homo sapiens

<400> 3856

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Ala	Lys	Tyr	His	Leu	Cys	Ser	Ala	Gly	Trp	Leu	Glu	Thr	Gly	Arg	Val
			20					25					30		
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<210> 3857
<211> 797
<212> DNA
<213> Homo sapiens
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ccttccacca  ggtcctgggc  gagaagcata  agcgcggcca  cctggccgag  gccgagggcc
180
acagggacac  ttgcgacgaa  gactcgggtg  ccggcgagtc  ggaccgcata  gacgatggca
240
ctgttaatgg  ccgcggctgc  tccccgggcg  agtcggcctc  ggggggcctg  tccaaaaagc
300
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420
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480
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660
gcgacacttg ttcttcacac acccccattc ggcgtagtac ccagagagct caagatgtgt
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797

<210> 3858

<211> 76

<212> PRT

<213> Homo sapiens

<400> 3858

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Ala	Thr	Arg	Ala	Ala	Pro	Cys	Pro	Thr	Ser	Cys	Arg	Ala	Trp	Cys	Ser
			20					25					30		
Ala	Pro	Cys	Ser	Thr	Ser	Ala	Arg	Pro	Ser	Thr	Arg	Ser	Trp	Ala	Arg
		35					40					45			
Ser	Ile	Ser	Ala	Ala	Thr	Trp	Pro	Arg	Pro	Arg	Ala	Thr	Gly	Thr	Leu
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Ala	Thr	Lys	Thr	Arg	Trp	Pro	Ala	Ser	Arg	Thr	Ala				
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<210> 3859

<211> 1449

<212> DNA

<213> Homo sapiens

<400> 3859

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120
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240
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<210> 3860

<211> 348

<212> PRT

<213> Homo sapiens

<400> 3860

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				20				25					30		
Asp	Cys	Asn	Glu	Thr	Ser	Phe	Phe	Phe	Glu	Ala	Arg	Ser	Lys	Thr	Ala
		35					40					45			
Cys	Lys	His	Leu	Trp	Lys	Cys	Ser	Val	Glu	His	His	Thr	Phe	Phe	Arg
	50					55					60				
Met	Pro	Glu	Asn	Glu	Ser	Asn	Ser	Leu	Ser	Arg	Lys	Leu	Ser	Lys	Phe

65		70		75		80									
Gly	Ser	Ile	Arg	Tyr	Lys	His	Arg	Tyr	Ser	Gly	Arg	Thr	Ala	Leu	Gln
				85					90					95	
Met	Ser	Arg	Asp	Leu	Ser	Ile	Gln	Leu	Pro	Arg	Pro	Asp	Gln	Asn	Val
			100					105					110		
Thr	Arg	Ser	Arg	Ser	Lys	Thr	Tyr	Pro	Lys	Arg	Ile	Ala	Gln	Thr	Gln
		115					120					125			
Pro	Ala	Glu	Ser	Asn	Thr	Ile	Ser	Arg	Ile	Thr	Ala	Asn	Met	Glu	Asn
	130					135					140				
Gly	Glu	Asn	Glu	Gly	Thr	Ile	Lys	Ile	Ile	Ala	Pro	Ser	Pro	Val	Lys
145					150					155				160	
Ser	Phe	Lys	Lys	Ala	Lys	Asn	Glu	Asn	Ser	Pro	Asp	Thr	Gln	Arg	Ser
			165					170					175		
Lys	Ser	His	Ala	Pro	Trp	Glu	Glu	Asn	Gly	Pro	Gln	Ser	Gly	Leu	Tyr
		180						185					190		
Asn	Ser	Pro	Ser	Asp	Arg	Thr	Lys	Ser	Pro	Lys	Phe	Pro	Tyr	Thr	Arg
	195						200					205			
Arg	Arg	Asn	Pro	Ser	Cys	Gly	Ser	Asp	Asn	Asp	Ser	Val	Gln	Pro	Val
	210					215					220				
Arg	Arg	Arg	Lys	Ala	His	Asn	Ser	Gly	Glu	Asp	Ser	Asp	Leu	Lys	Gln
225					230					235				240	
Arg	Arg	Arg	Ser	Arg	Ser	Arg	Cys	Asn	Thr	Ser	Ser	Gly	Ser	Glu	Ser
			245					250					255		
Glu	Asn	Ser	Asn	Arg	Glu	His	Arg	Lys	Lys	Arg	Asn	Arg	Ile	Arg	Gln
		260					265						270		
Glu	Asn	Asp	Met	Val	Asp	Ser	Ala	Pro	Gln	Trp	Glu	Ala	Val	Leu	Arg
	275					280						285			
Arg	Gln	Lys	Glu	Lys	Asn	Gln	Ala	Asp	Pro	Asn	Asn	Arg	Arg	Ser	Arg
	290					295					300				
His	Arg	Ser	Arg	Ser	Arg	Ser	Pro	Asp	Ile	Gln	Ala	Lys	Glu	Glu	Leu
305					310					315				320	
Trp	Lys	His	Ile	Gln	Lys	Glu	Leu	Val	Asp	Pro	Ser	Gly	Leu	Ser	Glu
			325					330					335		
Glu	Gln	Leu	Lys	Glu	Ile	Pro	Tyr	Thr	Lys	Ile	Glu				
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<210> 3861

<211> 748

<212> DNA

<213> Homo sapiens

<400> 3861

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ggagagggca gctactccaa ggtgaagggtg gccacatcca agaagtacaa gggtagcgtg
180

gccatcaagg tgggtggaccg gcggcgagcg ccccggaact tcgtcaacaa gttcctgccg
240

cgagagctgt ccatectgcg gggcgtgcga caccgcaca tcgtgcacgt ctteagagttc
300

atcgaggtgt gcaacgggaa actgtacatc gtgatggaag cggccgccac cgacctgctg
360


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<210> 3863
<211> 341
<212> DNA
<213> Homo sapiens
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<400> 3863

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 180
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 240
 gtccaggctg acggtacatt ccaggctagc catcctatca taatcgaatc tgagtagatt
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 341

<210> 3864

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3864

Met	Ala	Cys	Pro	Lys	Arg	Leu	Ile	Lys	Ile	Tyr	Ser	Asp	Ser	Ile	Met
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Ile	Gly	Trp	Leu	Ala	Trp	Asn	Val	Pro	Ser	Ala	Trp	Thr	Leu	Arg	Glu
			20					25					30		
Leu	Gly	Cys	Gln	Pro	Met	Ala	Arg	Trp	Phe	Ser	Gly	Ser	Leu	Asp	Gln
		35					40					45			
Lys	Asn	Leu	Val	Glu	Ile	Ser	His	Thr	Val	Phe	Phe	Pro	Glu	Ser	Gln
	50					55					60				
Leu	Arg	Ala	Lys	Leu	Lys	Cys	Pro	Gly	Gly	Ser	Cys	Thr	Pro	Gly	Leu
65					70					75				80	
Lys	Lys	Ile	Gly	Ser	Leu	Lys	Val	Ser	Cys	Glu	Glu	Phe	Leu	Leu	Met
			85						90					95	
Gly	Leu	Arg	Tyr	Gln	His	Leu	Asp	Pro	Pro	Ser	Arg				
			100					105							

<210> 3865

<211> 492

<212> DNA

<213> Homo sapiens

<400> 3865

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 180
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 300
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tagtctgggt caaatagtac aaactgaata ttccttaacc aaaatgcttg gaagtaggcc
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 492

<210> 3866
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 3866
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 Ile Ile Asn Thr Asn Gly Leu Gly Gln Pro Ser His Ser Ser Leu Leu
 35 40 45
 Phe Thr Ser Leu Gln Leu Gln Leu Ser Phe Phe Ile Thr Leu Leu Phe
 50 55 60
 Leu Ser Ser Leu Gly Gln Ile Val Gln Thr Glu Tyr Ser Leu Thr Lys
 65 70 75 80
 Met Leu Gly Ser Arg Pro Gly Ala Ala Ala His Pro Cys Asn Pro Ser
 85 90 95
 Ile Leu Gly Gly Gln Ser Arg Gln Ile Thr Gln Gly Gln
 100 105

<210> 3867
 <211> 1032
 <212> DNA
 <213> Homo sapiens

<400> 3867
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 120
 ctggacagtg caaagcgatc ggaggacagg gagaagggag ctctgattga ggagctctta
 180
 caggcaaaac aggatcttca agatctgctg attgccaaag aggagcaaga agacctcttg
 240
 agaaagcgag agcgtgaact caccgccctg aaggagagccc tgaaagaaga ggtttccagc
 300
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 360
 gagagtgtgg aagaagcaac caagaatgtc gaggtcttgg cgagcaggag caacacttca
 420
 gagcaagacc aggcggggac tgaaatgcgc gtgaagcttc tgcaggagga gaatgagaag
 480
 ctgcagggaa gaagcgaaga gctggagcgg agagttgctc agcttcaaag gcagatcgag
 540
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 600

cgacagttag aggaggccct tgtgcacgcc agaaaggaag aaaaagaagc tgtgtcagcc
 660
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 720
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 840
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 900
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 960
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 1020
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 1032

<210> 3868

<211> 344

<212> PRT

<213> Homo sapiens

<400> 3868

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Lys	Met	Glu	Arg	Glu	Gln	His	Gln	Thr	Glu	Ile	Arg	Asp	Leu	Gln	Asp
				20				25					30		
Gln	Leu	Ser	Glu	Met	His	Asp	Glu	Leu	Asp	Ser	Ala	Lys	Arg	Ser	Glu
		35					40					45			
Asp	Arg	Glu	Lys	Gly	Ala	Leu	Ile	Glu	Glu	Leu	Leu	Gln	Ala	Lys	Gln
	50					55				60					
Asp	Leu	Gln	Asp	Leu	Leu	Ile	Ala	Lys	Glu	Glu	Gln	Glu	Asp	Leu	Leu
65				70					75					80	
Arg	Lys	Arg	Glu	Arg	Glu	Leu	Thr	Ala	Leu	Lys	Gly	Ala	Leu	Lys	Glu
				85					90					95	
Glu	Val	Ser	Ser	His	Asp	Gln	Glu	Met	Asp	Lys	Leu	Lys	Glu	Gln	Tyr
			100					105					110		
Asp	Ala	Glu	Leu	Gln	Ala	Leu	Arg	Glu	Ser	Val	Glu	Glu	Ala	Thr	Lys
		115					120					125			
Asn	Val	Glu	Val	Leu	Ala	Ser	Arg	Ser	Asn	Thr	Ser	Glu	Gln	Asp	Gln
	130					135					140				
Ala	Gly	Thr	Glu	Met	Arg	Val	Lys	Leu	Leu	Gln	Glu	Glu	Asn	Glu	Lys
145				150						155				160	
Leu	Gln	Gly	Arg	Ser	Glu	Glu	Leu	Glu	Arg	Val	Ala	Gln	Leu	Gln	
			165					170					175		
Arg	Gln	Ile	Glu	Asp	Leu	Lys	Gly	Asp	Glu	Ala	Lys	Ala	Lys	Glu	Thr
		180					185						190		
Leu	Lys	Lys	Tyr	Glu	Gly	Glu	Ile	Arg	Gln	Leu	Glu	Glu	Ala	Leu	Val
		195					200					205			
His	Ala	Arg	Lys	Glu	Glu	Lys	Glu	Ala	Val	Ser	Ala	Arg	Arg	Ala	Leu
	210					215					220				
Glu	Asn	Glu	Leu	Glu	Ala	Ala	Gln	Gly	Asn	Leu	Ser	Gln	Thr	Thr	Gln
225				230					235					240	
Glu	Gln	Lys	Gln	Leu	Ser	Glu	Lys	Leu	Lys	Glu	Glu	Ser	Glu	Gln	Lys

				245					250					255					
Glu	Gln	Leu	Arg	Arg	Leu	Lys	Asn	Glu	Met	Glu	Asn	Glu	Arg	Trp	His				
			260					265					270						
Leu	Gly	Lys	Thr	Ile	Glu	Lys	Leu	Gln	Lys	Glu	Met	Ala	Asp	Ile	Val				
		275					280					285							
Glu	Ala	Ser	Arg	Thr	Ser	Thr	Leu	Glu	Leu	Gln	Asn	Gln	Leu	Asp	Glu				
	290					295				300									
Tyr	Lys	Glu	Lys	Asn	Arg	Arg	Glu	Leu	Ala	Glu	Met	Gln	Arg	Gln	Leu				
305				310					315					320					
Lys	Glu	Lys	Thr	Leu	Glu	Ala	Glu	Lys	Ser	Arg	Leu	Thr	Ala	Met	Lys				
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Met	Gln	Asp	Glu	Met	Arg	Leu	Met												
			340																

<210> 3869

<211> 1226

<212> DNA

<213> Homo sapiens

<400> 3869

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120
tgatgcacac acattccaga aatgcagagg tatgctgctg ccacggggta ggggtgcggg
180
aggcggcctg gcctcatggc cgcagaccgt gcccagccc gggcctggca ggtagctggc
240
cactgataaa tgccactggg atcctaggag aagctgggga ccatgcgtga ggtactgaag
300
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360
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420
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480
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ggccccctaa agaggacca agatcaggaa aactccccag tttaaaaaaa tatctgtcca
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780
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900
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1020

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gctctcggca gcctgcacgg cccggctcag ggccttggtg agctcctcta ggtcgcccag
1080
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1226

<210> 3870
<211> 100
<212> PRT
<213> Homo sapiens

<400> 3870
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20 25 30
Leu Leu Gly Ser Gln Trp His Leu Ser Val Ala Ser Tyr Leu Pro Gly
35 40 45
Pro Gly Trp Gly Thr Val Cys Gly His Glu Ala Arg Pro Pro Pro Ala
50 55 60
Pro Leu Pro Arg Gly Ser Ser Ile Pro Leu His Phe Trp Asn Val Cys
65 70 75 80
Ala Ser Met Met Phe Val Tyr Leu Arg His Leu Lys Ile Tyr Phe Arg
85 90 95
Tyr Glu Gly Lys
100

<210> 3871
<211> 473
<212> DNA
<213> Homo sapiens

<400> 3871
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120
tgggatggtt gagttgacag ctctgaatcc cagaaacctt aattttggct tatcttttga
180
taggctgagg gaaaatacaa agatgaccc gttgatctcc gccttgatat tgaacgtcgt
240
aaaaaacata aggagagaga tcttaaacga ggtaaataca gagaatcagt ggattcccga
300
gactccagtc actcaaggga aaggtcagct gaaaaaacag agaaaactca taaaggatca
360
aagaaacaga agaaagacct ctgagagccg agacaagctg ggagcgaaag gagattttcc
420
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473

<210> 3872

<211> 66
<212> PRT
<213> Homo sapiens

<400> 3872
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20 25 30
Arg Glu Ser Val Asp Ser Arg Asp Ser Ser His Ser Arg Glu Arg Ser
35 40 45
Ala Glu Lys Thr Glu Lys Thr His Lys Gly Ser Lys Lys Gln Lys Lys
50 55 60
Asp Leu
65

<210> 3873
<211> 869
<212> DNA
<213> Homo sapiens

<400> 3873
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420
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660
cccaataaga aggacctcag tggaaacacg cccctcattt acgctgctc cgggtggccat
720
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780
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869

<210> 3874

<211> 289

<212> PRT

<213> Homo sapiens

<400> 3874

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           20           25           30
Glu Ala Tyr His Leu Ser Phe Glu Arg Arg Gln Lys Ser Ser Glu Ala
           35           40           45
Pro Val Gln Ser Pro Gln Arg Ser Val Asp Ser Ile Ser Gln Glu Ser
           50           55           60
Ser Thr Ser Ser Phe Ser Ser Met Ser Ala Gly Ser Arg Gln Glu Glu
65           70           75           80
Thr Lys Lys Asp Tyr Arg Glu Val Glu Lys Leu Leu Arg Ala Val Ala
           85           90           95
Asp Gly Asp Leu Glu Met Val Arg Tyr Leu Leu Glu Trp Thr Glu Glu
           100          105          110
Asp Leu Glu Asp Ala Glu Asp Thr Val Ser Ala Ala Asp Pro Glu Phe
           115          120          125
Cys His Pro Leu Cys Gln Cys Pro Lys Cys Ala Pro Ala Gln Lys Arg
           130          135          140
Leu Ala Lys Val Pro Ala Ser Gly Leu Gly Val Asn Val Thr Ser Gln
145          150          155          160
Asp Gly Ser Ser Pro Leu His Val Ala Ala Leu His Gly Arg Ala Asp
           165          170          175
Leu Ile Arg Leu Leu Leu Lys His Gly Ala Asn Ala Gly Ala Arg Asn
           180          185          190
Ala Asp Gln Ala Val Pro Leu His Leu Ala Cys Gln Gln Gly His Phe
           195          200          205
Gln Val Val Lys Cys Leu Leu Asp Ser Asn Ala Lys Pro Asn Lys Lys
           210          215          220
Asp Leu Ser Gly Asn Thr Pro Leu Ile Tyr Ala Cys Ser Gly Gly His
225          230          235          240Glu Leu
Val Ala Leu Leu Leu Gln His Gly Ala Ser Ile Asn Ala
           245          250          255
Leu Thr Ile Arg Gly Asn Thr Ala Leu His Glu Ala Val Ile Glu Lys
           260          265          270
His Val Phe Val Val Glu Leu Leu Leu Leu His Gly Ala Ser Val Arg
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<210> 3875

<211> 2640

<212> DNA

<213> Homo sapiens

<400> 3875

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120

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1740

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 1980
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<210> 3876

<211> 824

<212> PRT

<213> Homo sapiens

<400> 3876

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Gly	Gln	Glu	Leu	Leu	Val	Ala	Trp	Asn	Thr	Val	Ser	Thr	Gly	Leu	Val
			20					25					30		
Pro	Pro	Ala	Ala	Leu	Gly	Leu	Val	Ser	Ser	Arg	Thr	Ser	Gly	Ala	Val
		35					40					45			
Pro	Pro	Lys	Glu	Glu	Glu	Leu	Arg	Ala	Ala	Val	Glu	Val	Leu	Arg	Gly
	50					55					60				
His	Gly	Leu	His	Ser	Val	Leu	Glu	Glu	Trp	Phe	Val	Glu	Val	Leu	Gln
65					70					75					80
Asn	Asp	Leu	Gln	Ala	Asn	Ile	Ser	Pro	Glu	Phe	Trp	Asn	Ala	Ile	Ser
			85						90					95	
Gln	Cys	Glu	Asn	Ser	Ala	Asp	Glu	Pro	Gln	Cys	Leu	Leu	Leu	Leu	Leu
			100					105					110		
Asp	Ala	Phe	Gly	Leu	Leu	Glu	Ser	Arg	Leu	Asp	Pro	Tyr	Leu	Arg	Ser
		115					120					125			
Leu	Glu	Leu	Leu	Glu	Lys	Trp	Thr	Arg	Leu	Gly	Leu	Leu	Met	Gly	Thr

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Leu Phe Phe Ser Thr Pro Arg Thr Phe Gln Glu Met Ile Gln Arg Leu		160
	165	170
Tyr Gly Cys Phe Leu Arg Val Tyr Met Gln Ser Lys Arg Lys Gly Glu		175
	180	185
Gly Gly Thr Asp Pro Glu Leu Glu Gly Glu Leu Asp Ser Arg Tyr Ala		190
	195	200
Arg Arg Arg Tyr Tyr Arg Leu Leu Gln Ser Pro Leu Cys Ala Gly Cys		205
	210	215
Ser Ser Asp Lys Gln Gln Cys Trp Cys Arg Gln Ala Leu Glu Gln Phe		220
225	230	235
His Gln Leu Ser Gln Val Leu His Arg Leu Ser Leu Leu Glu Arg Val		240
	245	250
Ser Ala Glu Ala Val Thr Thr Thr Leu His Gln Val Thr Arg Glu Arg		255
	260	265
Met Glu Asp Arg Cys Arg Gly Glu Tyr Glu Arg Ser Phe Leu Arg Glu		270
	275	280
Phe His Arg Trp Ile Glu Arg Val Val Gly Trp Leu Gly Lys Val Phe		285
	290	295
Leu Gln Asp Gly Pro Ala Arg Pro Ala Ser Pro Glu Ala Gly Asn Thr		300
305	310	315
Leu Arg Arg Trp Arg Cys His Val Gln Arg Phe Phe Tyr Arg Ile Tyr		320
	325	330
Ala Ser Leu Arg Ile Glu Glu Leu Phe Ser Ile Val Arg Asp Phe Pro		335
	340	345
Asp Ser Arg Pro Ala Ile Glu Asp Leu Lys Tyr Cys Leu Glu Arg Thr		350
	355	360
Asp Gln Arg Gln Gln Leu Leu Val Ser Leu Lys Ala Ala Leu Glu Thr		365
	370	375
Arg Leu Leu His Pro Gly Val Asn Thr Cys Asp Ile Ile Thr Leu Tyr		380
385	390	395
Ile Ser Ala Ile Lys Ala Leu Arg Val Leu Asp Pro Ser Met Val Ile		400
	405	410
Leu Glu Val Ala Cys Glu Pro Ile Arg Arg Tyr Leu Arg Thr Arg Glu		415
	420	425
Asp Thr Val Arg Gln Ile Val Ala Gly Leu Thr Gly Asp Ser Asp Gly		430
	435	440
Thr Gly Asp Leu Ala Val Glu Leu Ser Lys Thr Asp Pro Ala Ser Leu		445
	450	455
Glu Thr Gly Gln Asp Ser Glu Asp Asp Ser Gly Glu Pro Glu Asp Trp		460
465	470	475
Val Pro Asp Pro Val Asp Ala Asp Pro Gly Lys Ser Ser Ser Lys Arg		480
	485	490
Arg Ser Ser Asp Ile Ile Ser Leu Leu Val Ser Ile Tyr Gly Ser Lys		495
	500	505
Asp Leu Phe Ile Asn Glu Tyr Arg Ser Leu Leu Ala Asp Arg Leu Leu		510
	515	520
His Gln Phe Ser Phe Ser Pro Glu Arg Glu Ile Arg Asn Val Glu Leu		525
	530	535
Leu Lys Leu Arg Phe Gly Glu Ala Pro Met His Phe Cys Glu Val Met		540
545	550	555
Leu Lys Asp Met Ala Asp Ser Arg Arg Ile Asn Ala Asn Ile Arg Glu		560

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tcccctagca gttctgaaaa gagaagtaag aatcctatct ctaggccatt agaaggtaag
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420
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 780
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 840
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 960
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<210> 3878

<211> 370

<212> PRT

<213> Homo sapiens

<400> 3878

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Gly	Ser	Pro	Tyr	Val	Asn	Gly	Ser	Leu	Gly	Glu	Val	Thr	Pro	Cys	Gln
			20					25					30		
His	Ala	Lys	Lys	Ala	Asn	Gly	Pro	Asn	Tyr	Ile	Gln	Pro	Gln	Lys	Arg
		35					40					45			
Gln	Thr	Thr	Phe	Glu	Ser	Gln	Asp	Arg	Lys	Ala	Val	Ser	Pro	Ser	Ser
	50					55					60				
Ser	Glu	Lys	Arg	Ser	Lys	Asn	Pro	Ile	Ser	Arg	Pro	Leu	Glu	Gly	Lys
65					70					75				80	
Lys	Ser	Leu	Ser	Leu	Ser	Ala	Lys	Thr	His	Asn	Ile	Gly	Phe	Asp	Lys
			85					90					95		
Asp	Ser	Cys	His	Ser	Thr	Thr	Lys	Thr	Glu	Ala	Ser	Gln	Glu	Glu	Arg
		100						105				110			
Ser	Asp	Ser	Ser	Gly	Leu	Thr	Ser	Leu	Lys	Lys	Ser	Pro	Lys	Val	Ser
	115						120					125			
Ser	Lys	Asp	Thr	Arg	Glu	Ile	Lys	Thr	Asp	Phe	Ser	Leu	Ser	Ile	Ser
	130					135					140				
Asn	Ser	Ser	Asp	Val	Ser	Ala	Lys	Asp	Lys	His	Ala	Glu	Asp	Asn	Glu
145					150					155				160	
Lys	Arg	Leu	Ala	Ala	Leu	Glu	Ala	Arg	Gln	Lys	Ala	Lys	Glu	Val	Gln
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Lys	Lys	Leu	Val	His	Asn	Ala	Leu	Ala	Asn	Leu	Asp	Gly	His	Pro	Glu

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<400> 3879
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420
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480
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660

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2280

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<210> 3880
<211> 116
<212> PRT
<213> Homo sapiens

<400> 3880
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Ala Ile Asp Leu Ser Arg Asn Gln Phe Gln Asp Phe Pro Glu Gln Leu
35 40 45
Thr Ala Leu Pro Ala Leu Glu Thr Ile Asn Leu Glu Glu Asn Glu Ile
50 55 60
Val Asp Val Pro Val Glu Lys Leu Ala Ala Met Pro Ala Leu Arg Ser
65 70 75 80
Ile Asn Leu Arg Phe Asn Pro Leu Asn Ala Glu Val Arg Val Ile Ala
85 90 95
Pro Pro Leu Ile Lys Phe Asp Met Leu Met Ser Pro Glu Gly Ala Arg
100 105 110
Ala Pro Leu Pro
115

<210> 3881
<211> 1393
<212> DNA
<213> Homo sapiens

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180

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<210> 3882

<211> 277

<212> PRT

<213> Homo sapiens

<400> 3882

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Asp	Ser	Gly	Ala	Lys	Gly	Gly	Lys	Val	Lys	Leu	Leu	Gly	Lys	Pro	Val
			20					25					30		
Gln	Met	Pro	Ser	Leu	Asn	Trp	Pro	Glu	Ala	Leu	Pro	Pro	Pro	Pro	Pro

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<210> 3883
<211> 943
<212> DNA
<213> Homo sapiens
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<210> 3884

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3884

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			20					25					30		
Lys	Ala	Arg	Arg	Arg	Thr	Arg	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
		35					40					45			
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
	50					55					60				
Asp	Gly	Arg	Lys	Lys	Arg	Gly	Lys	Tyr	Lys	Asp	Lys	Arg	Arg	Lys	Lys
65					70					75				80	
Lys	Lys	Lys	Arg	Lys	Lys	Leu	Lys	Lys	Lys	Gly	Lys	Glu	Lys	Ala	Glu
			85					90						95	
Ala	Gln	Gln	Val	Glu	Ala	Leu	Pro	Gly	Pro	Ser	Leu	Asp	Gln	Trp	His
			100					105					110		
Arg	Ser	Ala	Gly	Glu	Glu	Glu	Asp	Gly	Pro	Val	Leu	Thr	Asp	Glu	Gln
		115					120					125			
Val	Pro	Asn	Pro	Gly	His	Glu	Ala	His	Asp	Gln	Gly	Gly	Trp	Asp	Ala
		130				135					140				
Arg	Gln	Ser	Val	Ile	Arg	Lys	Val	Val	Asp	Pro	Glu	Thr	Gly	Arg	Thr
145					150				155					160	
Arg	Leu	Ile	Lys	Gly	Asp	Gly	Glu	Val	Leu	Glu	Glu	Ile	Val	Thr	Lys
			165					170					175		
Glu	Arg	His	Arg	Glu	Ile	Asn	Lys	Val	Gly	Val	Ala	Pro	Leu	Pro	Ala
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Ile	Arg	Pro	Gln	Leu	Cys	Leu									
		195													

<210> 3885

<211> 1671

<212> DNA

<213> Homo sapiens

<400> 3885
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<210> 3886
<211> 277
<212> PRT
<213> Homo sapiens

<400> 3886
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35 40 45
Gln Val Leu Ala Ala Thr Tyr Asn Gln Ala Ala Gln Leu Trp Lys Val
50 55 60
Gly Glu Ala Gln Ser Lys Glu Thr Leu Ser Gly His Lys Asp Lys Val
65 70 75 80
Thr Ala Ala Lys Phe Lys Leu Thr Arg His Gln Ala Val Thr Gly Ser
85 90 95
Arg Asp Arg Thr Val Lys Glu Trp Asp Leu Gly Arg Ala Tyr Cys Ser
100 105 110
Arg Thr Ile Asn Val Leu Ser Tyr Cys Asn Asp Val Val Xaa Trp Gly
115 120 125
Pro Tyr His His Xaa Ser Gly His Asn Asp Gln Lys Ile Arg Phe Trp
130 135 140
Asp Ser Xaa Gly Gly Pro Thr Ala Pro Arg Ser Ser Leu Xaa Gln Gly
145 150 155 160
Arg Val Thr Ser Leu Ser Leu Ser Xaa Arg Pro Thr Xaa His Leu Leu
165 170 175
Ser Cys Ser Arg Asp Asn Thr Leu Lys Val Ile Asp Leu Arg Val Ser
180 185 190
Asn Ile Arg Gln Val Phe Arg Ala Asp Gly Phe Lys Cys Gly Ser Asp
195 200 205
Trp Thr Lys Ala Val Phe Ser Pro Asp Arg Ser Tyr Ala Leu Ala Gly
210 215 220
Ser Cys Asp Gly Ala Leu Tyr Ile Trp Asp Val Asp Thr Gly Lys Leu
225 230 235 240
Glu Ser Arg Leu Gln Gly Pro His Cys Ala Ala Val Asn Ala Val Ala
245 250 255
Trp Cys Tyr Ser Gly Ser His Met Val Ser Val Asp Gln Gly Arg Lys
260 265 270
Val Val Leu Trp Gln
275

<210> 3887
<211> 5612
<212> DNA
<213> Homo sapiens

<400> 3887

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<213> Homo sapiens

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<210> 3892

<211> 179

<212> PRT

<213> Homo sapiens

<400> 3892

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			20					25					30		
Ser	Gly	Leu	Phe	Ala	Leu	Cys	Thr	Leu	Asp	Gly	Thr	Leu	Lys	Leu	Met
		35					40					45			
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		50				55					60				
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Glu	Glu	Val	Val	Ala	Cys	Ala	Trp	Asp	Gly	Gln	Thr	Tyr	Ile	Ile	Asp
			85					90					95		
His	Asn	Arg	Thr	Val	Val	Arg	Phe	Gln	Val	Asp	Glu	Asn	Ile	Arg	Ala
			100					105					110		
Phe	Cys	Ala	Gly	Leu	Tyr	Ala	Cys	Lys	Glu	Gly	Arg	Asn	Ser	Pro	Cys
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 <211> 1591
 <212> DNA
 <213> Homo sapiens

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<210> 3894

<211> 334

<212> PRT

<213> Homo sapiens

<400> 3894

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		20						25					30		
Gly	Glu	Ser	Phe	Val	Met	Tyr	Tyr	Lys	Ser	Lys	Glu	Asn	Cys	Val	Val
		35					40					45			
Asp	Asn	Ile	Lys	Val	Cys	Ser	Asn	Asp	Thr	Gly	Ser	Gly	Lys	Phe	Lys
	50					55					60				
Cys	Val	Cys	Ile	Thr	Met	Arg	Val	Pro	Arg	Asn	Pro	Thr	Ile	Gly	Asp
65					70					75				80	
Lys	Phe	Ala	Ser	Arg	His	Gly	Gln	Lys	Gly	Ile	Leu	Ser	Arg	Leu	Trp
				85					90					95	
Pro	Ala	Glu	Asp	Met	Pro	Phe	Thr	Glu	Ser	Gly	Met	Val	Pro	Asp	Ile
		100						105					110		
Leu	Phe	Asn	Pro	His	Gly	Phe	Pro	Ser	Arg	Met	Thr	Ile	Gly	Met	Leu
		115					120					125			
Ile	Glu	Ser	Met	Ala	Gly	Lys	Ser	Ala	Ala	Leu	His	Gly	Leu	Cys	His
	130					135					140				
Asp	Ala	Thr	Pro	Phe	Ile	Phe	Ser	Glu	Glu	Asn	Ser	Ala	Leu	Glu	Tyr
145					150					155				160	
Phe	Gly	Glu	Met	Leu	Lys	Ala	Ala	Gly	Tyr	Asn	Phe	Tyr	Gly	Thr	Glu
			165					170					175		
Arg	Leu	Tyr	Ser	Gly	Ile	Ser	Gly	Leu	Glu	Leu	Glu	Ala	Asp	Ile	Phe
		180					185					190			
Ile	Gly	Val	Val	Tyr	Tyr	Gln	Arg	Leu	Arg	His	Met	Val	Ser	Asp	Lys
	195					200					205				
Phe	Gln	Val	Arg	Thr	Thr	Gly	Ala	Arg	Asp	Arg	Val	Thr	Asn	Gln	Pro
	210					215					220				
Ile	Gly	Gly	Arg	Asn	Val	Gln	Gly	Gly	Ile	Arg	Phe	Gly	Glu	Met	Glu
225					230				235					240	
Arg	Asp	Ala	Leu	Leu	Ala	His	Gly	Thr	Ser	Phe	Leu	Leu	His	Asp	Arg
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<210> 3895
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<212> DNA
<213> Homo sapiens
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1227

<210> 3896

<211> 346

<212> PRT

<213> Homo sapiens

<400> 3896

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			20					25					30		
Pro	Glu	Asp	Thr	Pro	Glu	Asn	Thr	Val	Arg	Arg	Gln	Glu	Gln	Pro	Ser
		35					40					45			
Ile	Glu	Ser	Thr	Ser	Pro	Ile	Ser	Arg	Thr	Asp	Glu	Ile	Arg	Lys	Asn
	50					55					60				
Thr	Tyr	Arg	Thr	Leu	Asp	Ser	Leu	Glu	Gln	Thr	Ile	Lys	Gln	Leu	Glu
65					70					75					80
Asn	Thr	Ile	Ser	Glu	Met	Ser	Pro	Lys	Ala	Leu	Val	Asp	Thr	Ser	Cys
				85					90					95	
Ser	Ser	Asn	Arg	Asp	Ser	Val	Ala	Ser	Ser	Ser	His	Ile	Ala	Gln	Glu
			100					105					110		
Ala	Ser	Pro	Arg	Pro	Leu	Leu	Val	Pro	Asp	Glu	Gly	Pro	Thr	Ala	Leu
		115					120					125			
Glu	Pro	Pro	Thr	Ser	Ile	Pro	Ser	Ala	Ser	Arg	Lys	Gly	Ser	Ser	Gly
	130					135					140				
Ala	Pro	Gln	Thr	Ser	Arg	Met	Pro	Val	Pro	Met	Ser	Ala	Lys	Asn	Arg
145					150					155					160
Pro	Gly	Thr	Leu	Asp	Lys	Pro	Gly	Lys	Gln	Ser	Lys	Leu	Gln	Asp	Pro
				165				170						175	
Arg	Gln	Tyr	Arg	Gln	Ala	Asn	Gly	Ser	Ala	Lys	Lys	Ser	Gly	Gly	Asp
			180					185					190		
Phe	Lys	Pro	Thr	Ser	Pro	Ser	Leu	Pro	Ala	Ser	Lys	Ile	Pro	Ala	Leu
	195						200					205			
Ser	Pro	Ser	Ser	Gly	Lys	Ser	Ser	Ser	Leu	Pro	Ser	Ser	Ser	Gly	Asp
	210					215					220				
Ser	Ser	Asn	Leu	Pro	Asn	Pro	Pro	Ala	Thr	Lys	Pro	Ser	Ile	Ala	Ser
225					230					235					240
Asn	Pro	Leu	Ser	Pro	Gln	Thr	Gly	Pro	Pro	Ala	His	Ser	Ala	Ser	Leu
				245				250						255	
Ile	Pro	Ser	Val	Ser	Asn	Gly	Ser	Leu	Lys	Phe	Gln	Ser	Leu	Thr	His
			260				265						270		
Thr	Gly	Lys	Gly	His	His	Leu	Ser	Phe	Ser	Pro	Gln	Ser	Gln	Asn	Gly
	275						280					285			
Arg	Ala	Pro	Pro	Pro	Leu	Ser	Phe	Ser	Ser	Ser	Pro	Pro	Ser	Pro	Ala
	290					295					300				
Ser	Ser	Val	Ser	Leu	Asn	Gln	Gly	Ala	Lys	Gly	Thr	Arg	Thr	Ile	His
305					310					315					320
Thr	Pro	Ser	Leu	Thr	Ser	Tyr	Lys	Ala	Gln	Asn	Gly	Ser	Ser	Ser	Lys
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340

345

<210> 3897
<211> 366
<212> DNA
<213> Homo sapiens

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<210> 3898
<211> 111
<212> PRT
<213> Homo sapiens

<400> 3898
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35 40 45
Cys Val Gln Asp Val Ser Glu Thr Pro Val Pro Leu Pro Val Pro Leu
50 55 60
Ser Val Pro Leu Ser Thr Ser Val Thr Ser Ser Leu Arg Gly Ser His
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85 90 95
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<210> 3899
<211> 1092
<212> DNA
<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 3900

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			20					25					30		
Gly	Arg	Ser	Gly	Leu	Glu	Pro	Gly	Thr	Phe	Arg	Lys	Met	Ala	Ala	Ala
			35				40					45			
Arg	Pro	Ser	Leu	Gly	Arg	Val	Leu	Pro	Gly	Ser	Ser	Val	Leu	Phe	Leu
			50			55					60				
Cys	Asp	Met	Gln	Glu	Lys	Phe	Arg	His	Asn	Ile	Ala	Tyr	Phe	Pro	Gln
65					70					75				80	
Ile	Val	Ser	Val	Ala	Ala	Arg	Met	Leu	Lys	Val	Ala	Arg	Leu	Leu	Glu
				85					90					95	
Val	Pro	Val	Met	Leu	Thr	Glu	Gln	Tyr	Pro	Gln	Gly	Leu	Gly	Pro	Thr

	100		105		110										
Val	Pro	Glu	Leu	Gly	Thr	Xaa	Gly	Pro	Ser	Ala	Ala	Gly	Gln	Asp	Leu
	115		120		125										
Leu	Gln	His	Gly	Ala	Cys	Leu	Gln	Gln	Glu	Leu	Asp	Ser	Arg	Pro	Gln
	130		135		140										
Leu	Arg	Ser	Val	Leu	Leu	Cys	Gly	Ile	Glu	Ala	Gln	Ala	Cys	Ile	Leu
145			150		155									160	
Asn	Thr	Thr	Leu	Asp	Leu	Leu	Asp	Arg	Gly	Leu	Gln	Val	His	Val	Val
	165		170		175										
Val	Asp	Ala	Cys	Ser	Ser	Arg	Ser	Gln	Val	Asp	Arg	Leu	Val	Ala	Leu
	180		185		190										
Ala	Arg	Met	Arg	Gln	Ser	Gly	Ala	Phe	Leu	Ser	Thr	Ser	Glu	Gly	Leu
	195		200		205										
Ile	Leu	Gln	Leu	Val	Gly	Asp	Ala	Val	His	Pro	Gln	Phe	Lys	Glu	Ile
	210		215		220										
Gln	Lys	Leu	Ile	Lys	Glu	Pro	Ala	Pro	Asp	Ser	Gly	Leu	Leu	Gly	Leu
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<210> 3901

<211> 1287

<212> DNA

<213> Homo sapiens

<400> 3901

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<211> 312

<212> PRT

<213> Homo sapiens

<400> 3902

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			20					25					30		
Trp	Ala	Ala	Thr	Thr	Ala	Arg	Asn	Ala	Leu	Val	Val	Ser	Phe	Ala	Ala
			35				40					45			
Leu	Val	Ala	Tyr	Ser	Phe	Glu	Val	Thr	Gly	Tyr	Gln	Pro	Phe	Ile	Leu
	50					55					60				
Thr	Gly	Glu	Thr	Ala	Glu	Gly	Leu	Pro	Pro	Val	Arg	Ile	Pro	Pro	Phe
65					70					75					80
Ser	Val	Thr	Thr	Ala	Asn	Gly	Thr	Ile	Ser	Phe	Thr	Glu	Met	Val	Gln
				85					90					95	
Asp	Met	Gly	Ala	Gly	Leu	Ala	Val	Val	Pro	Leu	Met	Gly	Leu	Leu	Glu
			100					105					110		
Ser	Ile	Ala	Val	Ala	Lys	Ala	Phe	Ala	Ser	Gln	Asn	Asn	Tyr	Arg	Ile
		115					120					125			
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	130					135					140				
Ser	Leu	Val	Ser	Ser	Tyr	Pro	Val	Thr	Gly	Ser	Phe	Gly	Arg	Thr	Ala
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Val	Asn	Ala	Gln	Ser	Gly	Val	Cys	Thr	Pro	Ala	Gly	Gly	Leu	Val	Thr
			165						170					175	
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		180						185					190		
Tyr	Ile	Pro	Lys	Ser	Ala	Leu	Ala	Ala	Val	Ile	Ile	Met	Ala	Val	Ala
	195						200					205			
Pro	Leu	Phe	Asp	Thr	Lys	Ile	Phe	Arg	Thr	Leu	Trp	Arg	Val	Lys	Arg
	210					215					220				
Leu	Asp	Leu	Leu	Pro	Leu	Cys	Val	Thr	Phe	Leu	Leu	Cys	Phe	Trp	Glu
225					230					235					240
Val	Gln	Tyr	Gly	Ile	Leu	Ala	Gly	Ala	Leu	Val	Ser	Leu	Leu	Met	Leu

				245						250					255				
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			260						265					270					
Leu	Val	Leu	Gln	Pro	Ala	Ser	Gly	Leu	Ser	Phe	Pro	Val	Leu	Cys	Pro				
		275					280					285							
Pro	Leu	Pro	Ala	Val	Gln	Asp	Pro	Lys	Thr	Leu	Ser	Pro	Thr	Leu	Ser				
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<211> 598

<212> DNA

<213> Homo sapiens

<400> 3903

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<210> 3904

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3904

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		20					25					30							
Val	Ile	Phe	Met	Ala	Leu	Asp	Leu	Ala	Ser	Leu	Ala	Ser	Val	Arg	Ala				
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His	Asn	Ala	Gly	Ile	Ser	Ser	Cys	Gly	Arg	Thr	Arg	Glu	Ala	Phe	Asn				
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<212> DNA
<213> Homo sapiens
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<400> 3906																
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Lys	Ser	Pro	Ser	Val	Met	Leu	Val	Arg	Asn	Arg	Asp	Glu	Val	Gln	Ala	
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<210> 3907

<211> 4474

<212> DNA

<213> Homo sapiens

<400> 3907

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 <212> PRT
 <213> Homo sapiens

<400> 3908

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His	Arg	Thr	Arg	Leu	Phe	Phe	Pro	Ser	Ser	Ser	Gly	Ser	Ala	Ser	Thr
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3055

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<212> DNA

<213> Homo sapiens

<400> 3909

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<212> DNA

<213> Homo sapiens

<400> 3913

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 50 55 60
 Ile Lys Asn Leu Lys Ile Ala Val Ser Asn Ile Val Thr Gln Pro Pro
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 Gln Pro Gly Ala Ile Arg Lys Leu Leu Asn Asp Val Val Ser Gly Ser
 85 90 95
 Gln Pro Ala Glu Gly Leu Val Ala Asn Val Ile Thr Ala Gly Asp Tyr
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 Asp Leu Asn Ile Ser Ala Thr Thr Pro Trp Phe Glu Ser Tyr Arg Glu
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 Thr Phe Leu Gln Ser Met Pro Ala Ser Asp His Glu Phe Leu Asn His
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 Tyr Leu Ala Cys Met Leu Val Ala Ser Ser Ser Glu Ala Glu Pro Val
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 Glu Gln Phe Ser Lys Leu Ser Gln Glu Gln His Arg Ile Gln His Asn
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 Ser Asp Tyr Ser Tyr Pro Lys Trp Phe Ile Pro Asn Thr Leu Lys Tyr
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 Tyr Val Leu Leu His Asp Val Ser Ala Gly Asp Glu Gln Arg Ala Glu
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 Ser Ile Tyr Glu Glu Met Lys Gln Lys Tyr Gly Thr Gln Gly Cys Tyr

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Asp Gly Leu Pro Asn Asn Phe Arg Ala His Pro Leu Gln Leu Glu Gln		285
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Gly Ala Cys Leu Thr Leu Thr Asp His Asp Arg Ile Arg Gln Phe Ile		335
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Arg Gln Leu Asn Asp Gln Leu Ile Ser Arg Lys Gly Leu Ser Arg Ser		365
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Val Gln His Tyr Asp Leu Ala Tyr Ser Cys Tyr His Thr Ala Lys Lys		430
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<211> 342
<212> PRT
<213> Homo sapiens

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50 55 60
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Glu Glu Glu Glu Val Glu Glu Glu Gly Glu Glu Asp Val Phe Thr Glu
85 90 95
Lys Ala Ser Pro Asp Met Asp Gly Tyr Pro Ala Leu Lys Val Asp Lys
100 105 110
Glu Thr Asn Thr Glu Thr Pro Ala Pro Ser Pro Thr Val Val Arg Pro
115 120 125
Lys Asp Arg Arg Val Gly Thr Pro Ser Gln Gly Pro Phe Leu Arg Gly
130 135 140
Ser Thr Ile Ile Arg Ser Lys Thr Phe Ser Pro Gly Pro Gln Ser Gln
145 150 155 160
Tyr Val Cys Arg Leu Asn Arg Ser Asp Ser Asp Ser Ser Thr Leu Ser
165 170 175
Lys Lys Pro Pro Phe Val Arg Asn Ser Leu Glu Arg Arg Ser Val Arg
180 185 190
Met Lys Arg Pro Ser Pro Pro Pro Gln Pro Ser Ser Val Lys Ser Leu
195 200 205
Arg Ser Glu Arg Leu Ile Arg Thr Ser Leu Asp Leu Glu Leu Asp Leu
210 215 220
Gln Ala Thr Arg Thr Trp His Ser Gln Leu Thr Gln Glu Ile Ser Val
225 230 235 240
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245 250 255
Lys Glu Leu Pro Gln Trp Leu Arg Glu Asp Glu Arg Phe Arg Leu Leu
260 265 270
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275 280 285
Glu Leu Gln Thr Asp Lys Met Met Arg Ala Ala Ala Lys Asp Val His
290 295 300
Arg Leu Arg Gly Gln Ser Cys Lys Glu Pro Pro Glu Val Gln Ser Phe
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<210> 3917

<211> 597

<212> DNA

<213> Homo sapiens

<400> 3917

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<210> 3918

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3918

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			20					25					30		
Pro	Asp	Asn	Glu	Asp	Ser	Gly	Asp	Ser	Lys	Asp	Ile	Arg	Leu	Thr	Leu
			35				40					45			
Met	Glu	Glu	Val	Leu	Leu	Leu	Gly	Leu	Lys	Asp	Lys	Glu	Gly	Tyr	Thr
			50				55				60				
Ser	Phe	Trp	Asn	Asp	Cys	Ile	Ser	Ser	Gly	Leu	Arg	Gly	Gly	Ile	Leu
					70					75				80	
Ile	Glu	Leu	Ala	Met	Arg	Gly	Arg	Ile	Tyr	Leu	Glu	Pro	Pro	Thr	Met
				85				90						95	
Arg	Lys	Lys	Arg	Leu	Leu	Asp	Arg	Lys	Val	Leu	Leu	Lys	Ser	Asp	Ser
				100				105					110		
Pro	Thr	Gly	Asp	Val	Leu	Leu	Asp	Glu	Thr	Leu	Lys	His	Ile	Lys	Ala
			115				120					125			
Thr	Glu	Pro	Thr	Glu	Thr	Val	Gln	Thr	Trp	Ile	Glu	Leu	Leu	Thr	Gly

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<210> 3919
<211> 1278
<212> DNA
<213> Homo sapiens

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 <211> 426
 <212> PRT
 <213> Homo sapiens

<400> 3920

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			20					25					30		
Leu	Thr	Gln	Glu	Arg	Asp	Tyr	Leu	Gln	Ala	Gln	His	Pro	Pro	Ser	Pro
		35					40					45			
Ile	Lys	Ser	Ser	Ser	Ala	Asp	Ser	Thr	Pro	Ser	Pro	Thr	Ser	Ser	Leu
	50					55					60				
Ser	Ser	Glu	Asp	Lys	Gln	His	Leu	Ala	Val	Glu	Leu	Ala	Asp	Thr	Lys
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Ala	Arg	Leu	Arg	Arg	Val	Arg	Gln	Glu	Leu	Glu	Asp	Lys	Thr	Glu	Gln
				85				90						95	
Leu	Val	Asp	Thr	Arg	His	Glu	Val	Asp	Gln	Leu	Val	Leu	Glu	Leu	Gln
			100					105					110		
Lys	Val	Lys	Gln	Glu	Asn	Ile	Gln	Leu	Ala	Ala	Asp	Ala	Arg	Ser	Ala
		115					120					125			
Arg	Ala	Tyr	Arg	Asp	Glu	Leu	Asp	Ser	Leu	Arg	Glu	Lys	Ala	Asn	Arg
	130					135				140					
Val	Glu	Arg	Leu	Glu	Leu	Glu	Leu	Thr	Arg	Cys	Lys	Glu	Lys	Leu	His
145					150					155				160	
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Ile	Ile	Leu	Ile	Glu	Thr	Lys	Ala	Met	Leu	Glu	Glu	Gln	Leu	Thr	Ala
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Ala	Arg	Ala	Arg	Gly	Asp	Lys	Val	His	Glu	Leu	Glu	Lys	Glu	Asn	Leu
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Gln	Leu	Lys	Ser	Lys	Leu	His	Asp	Leu	Glu	Leu	Asp	Arg	Asp	Thr	Asp
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Lys	Lys	Arg	Ile	Glu	Glu	Leu	Leu	Glu	Glu	Asn	Met	Val	Leu	Glu	Ile
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Ala	Gln	Lys	Gln	Ser	Met	Asn	Glu	Ser	Ala	His	Leu	Gly	Trp	Glu	Leu
				245					250					255	
Glu	Gln	Leu	Ser	Lys	Asn	Ala	Asp	Leu	Ser	Asp	Ala	Ser	Arg	Lys	Ser
		260						265					270		
Phe	Val	Phe	Glu	Leu	Asn	Glu	Cys	Ala	Ser	Ser	Arg	Ile	Leu	Lys	Leu
		275					280						285		
Glu	Lys	Glu	Asn	Gln	Ser	Leu	Gln	Ser	Thr	Ile	Gln	Gly	Leu	Arg	Asp
	290					295					300				
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Lys	Glu	Asn	His	Gln	Leu	Ser	Lys	Lys	Ile	Glu	Lys	Leu	Gln	Thr	Gln
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Leu	Glu	Arg	Glu	Lys	Gln	Ser	Asn	Gln	Asp	Leu	Glu	Thr	Leu	Ser	Glu
		340						345					350		
Glu	Leu	Ile	Arg	Glu	Lys	Glu	Gln	Leu	Gln	Ser	Asp	Met	Glu	Thr	Leu
	355						360					365			
Lys	Ala	Asp	Lys	Ala	Arg	Gln	Ile	Lys	Asp	Leu	Glu	Gln	Glu	Lys	Asp

370	375	380
His Leu Asn Arg Ala Met Trp Ser Leu Arg Glu Arg Ser Gln Val Ser		
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 <212> DNA
 <213> Homo sapiens

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<210> 3922
 <211> 126
 <212> PRT
 <213> Homo sapiens

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35 40 45
Asp Ser Val Gly Pro Ile Pro Ala Pro Arg Gly Asp Gly Cys Cys Arg
50 55 60
Asp Val Gln Ala Val Glu Gly Ser Arg Glu Trp Ala Trp Arg Ser Ala
65 70 75 80
Ser Leu Ala Pro Leu Leu Asp Ala Phe Leu Gln Pro Leu Glu Leu Arg
85 90 95
Gln Cys Ser Val Arg Met Ile Ile Gly Phe Pro Pro Gln Phe Leu Ala
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<210> 3923
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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 3924

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			20					25					30		
Ser	Glu	Tyr	Thr	Gly	Pro	Thr	Ser	Ala	Asp	Leu	Asp	His	Phe	Pro	Ser
		35					40					45			
Val	Ser	Gln	Thr	Lys	Ala	Glu	Gln	Asp	Ser	Asp	Asn	Lys	Ser	Ser	Thr
	50					55					60				
Glu	Ile	Pro	Leu	Glu	Thr	Cys	Cys	Ser	Ser	Glu	Leu	Lys	Gly	Gly	Gly
65					70					75				80	
Ser	Gly	Thr	Ser	Leu	Glu	Arg	Glu	Gln	Phe	Glu	Gly	Leu	Gly	Ser	Thr
			85					90					95		
Pro	Asp	Ala	Lys	Leu	Asp	Lys	Thr	Cys	Ile	Ser	Arg	Ala	Met	Lys	Ile
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<210> 3926

<211> 683

<212> PRT

<213> Homo sapiens

<400> 3926

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			20					25					30		
Thr	Arg	Pro	Gln	Pro	Val	Leu	Pro	Leu	Leu	Asp	Leu	Asn	Asn	Gln	Ser
			35				40					45			
Val	Gly	Ile	Glu	Gly	Gly	Ala	Arg	Lys	Gly	Val	Ser	Gln	Lys	Asn	Asn
	50					55					60				
Asp	Leu	Thr	Ser	Cys	Cys	Phe	Ser	Asp	Ala	Lys	Thr	Met	Tyr	Glu	Val
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Phe	Gln	Arg	Gly	Leu	Ala	Val	Ser	Asp	Asn	Gly	Pro	Cys	Leu	Gly	Tyr
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Arg	Lys	Pro	Asn	Gln	Pro	Tyr	Arg	Trp	Leu	Ser	Tyr	Lys	Gln	Val	Ser
			100					105					110		
Asp	Arg	Ala	Glu	Tyr	Leu	Gly	Ser	Cys	Leu	Leu	His	Lys	Gly	Tyr	Lys
		115				120					125				
Ser	Ser	Pro	Asp	Gln	Phe	Val	Gly	Ile	Phe	Ala	Gln	Asn	Arg	Pro	Glu
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Trp	Ile	Ile	Ser	Glu	Leu	Ala	Cys	Tyr	Thr	Tyr	Ser	Met	Val	Ala	Val
145					150				155					160	
Pro	Leu	Tyr	Asp	Thr	Leu	Gly	Pro	Glu	Ala	Ile	Val	His	Ile	Val	Asn

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Lys Ala Asp Ile Ala Met Val Ile Cys Asp Thr Pro Gln Lys Ala Leu
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195 200 205
Ile Ile Leu Met Asp Pro Phe Asp Asp Asp Leu Lys Gln Arg Gly Glu
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Lys Ser Gly Ile Glu Ile Leu Ser Leu Tyr Asp Ala Glu Asn Leu Asp
225 230 235 240
Lys Glu His Phe Arg Lys Pro Val Pro Pro Ser Pro Glu Asp Leu Ser
245 250 255
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260 265 270
Ile Thr His Gln Asn Ile Val Ser Asn Ala Ala Ala Phe Leu Lys Cys
275 280 285
Val Glu His Ala Tyr Glu Pro Thr Pro Asp Asp Val Ala Ile Ser Tyr
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Leu Pro Leu Ala His Met Phe Glu Arg Ile Val Gln Ala Val Val Tyr
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Ala Asp Asp Met Lys Thr Leu Lys Pro Thr Leu Phe Pro Ala Val Pro
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Arg Leu Leu Asn Arg Ile Tyr Asp Lys Val Gln Asn Glu Ala Lys Thr
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Pro Leu Lys Lys Phe Leu Leu Lys Leu Ala Val Ser Ser Lys Phe Lys
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Glu Leu Gln Lys Gly Ile Ile Arg His Asp Ser Phe Trp Asp Lys Leu
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Val Thr Gly Ala Ala Pro Ile Ser Thr Pro Val Leu Thr Phe Phe Arg
420 425 430
Ala Ala Met Gly Cys Trp Val Phe Glu Ala Tyr Gly Gln Thr Glu Cys
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Thr Gly Gly Cys Thr Phe Thr Leu Pro Gly Asp Trp Thr Ser Gly His
450 455 460
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465 470 475 480
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485 490 495
Gly Thr Asn Val Phe Lys Gly Tyr Leu Lys Asp Pro Glu Lys Thr Gln
500 505 510
Glu Ala Leu Asp Ser Asp Gly Trp Leu His Thr Gly Asp Ile Gly Arg
515 520 525
Trp Leu Pro Asn Gly Thr Leu Lys Ile Ile Asp Arg Lys Lys Asn Ile
530 535 540
Phe Lys Leu Ala Gln Gly Glu Tyr Ile Ala Pro Glu Lys Ile Glu Asn
545 550 555 560
Ile Tyr Asn Arg Ser Gln Pro Val Leu Gln Ile Phe Val His Gly Glu
565 570 575
Ser Leu Arg Ser Ser Leu Val Gly Val Val Val Pro Asp Thr Asp Val
580 585 590
Leu Pro Ser Phe Ala Ala Lys Leu Gly Val Lys Gly Ser Phe Glu Glu

595	600	605
Leu Cys Gln Asn Gln Val Val Arg Glu Ala Ile Leu Glu Asp Leu Gln		
610	615	620
Lys Ile Gly Lys Glu Ser Gly Leu Lys Thr Phe Glu Gln Val Lys Ala		
625	630	635
Ile Phe Leu His Pro Glu Pro Phe Ser Ile Glu Asn Gly Leu Leu Thr		
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<210> 3927

<211> 3197

<212> DNA

<213> Homo sapiens

<400> 3927

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 1080

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<210> 3928

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3928

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			20					25					30		
Asp	Ser	Ser	Ser	Arg	Arg	Arg	Arg	Ser	Cys	Cys	Thr	Gly	Ser	Leu	Gly
		35					40					45			
Pro	Met	Pro	Arg	Leu	Pro	Ser	Leu	Trp	Pro	Leu	Ser	Leu	Pro	Leu	Arg
	50					55					60				
Ser	Leu	Ser	Ser	Pro	His	Arg	Val	Gln	Gly	Leu	Gly	Pro	Pro	Arg	Arg
65					70					75					80
Leu	Lys	Ser	Gln	Leu	Leu	Pro	Arg	Phe	Phe	Trp	Arg	Arg	Gln	Gln	Glu
			85						90					95	
Pro	Leu	Ser	Ser	Phe	Pro	Gly	Arg	Asn	Glu	Gly	Gly	Ser	Glu	Met	Glu
			100					105					110		
Ile	Leu	Gly	Val	Cys	Pro	Val	Ser	Pro	Gly	Ala	Leu	Ser	Tyr	Met	Glu
		115					120					125			
Ser	Pro	Thr	Gly	Phe	Trp	Arg	Pro	Arg	Glu	Ala	Ser	Ser	Leu	Glu	Leu
		130				135						140			
Ala	Lys	Gly	Ile	Ser	Lys	Arg	Arg	His	Phe	Leu	Pro	Ala	Pro	Ala	Leu
145					150					155					160
Cys	Pro	Asn	Pro	Arg	Ser	Ser	Glu	Ala	Phe	Pro	Gly	Ala	Val	Cys	Val
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Thr	Leu	Ala	Ile												
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<210> 3929

<211> 470

<212> DNA

<213> Homo sapiens

<400> 3929

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<210> 3930

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3930

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			20					25					30		
Gln	Ser	Glu	Asn	Glu	Ala	Ser	Pro	Val	Lys	Arg	Pro	Arg	Leu	Leu	Glu
	35						40					45			
Asn	Thr	Glu	Arg	Ser	Glu	Glu	Thr	Ser	Arg	Ser	Lys	Gln	Lys	Ser	Arg
	50					55					60				
Arg	Arg	Cys	Phe	Gln	Cys	Gln	Thr	Lys	Leu	Glu	Leu	Val	Gln	Gln	Glu
65				70					75					80	
Leu	Gly	Ser	Cys	Arg	Cys	Gly	Tyr	Val	Phe	Cys	Met	Leu	His	Arg	Leu
			85						90				95		
Pro	Glu	Gln	His	Asp	Cys	Thr	Phe	Asp	His	Met	Gly	Val	Ala	Gly	Arg
			100					105					110		
Ser	His	His													
			115												

<210> 3931

<211> 3568

<212> DNA

<213> Homo sapiens

<400> 3931

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 180

gcattctata atttcaaag aaatctatac tttaaaaaca attaatgtca aattttgtca
240
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300
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360
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420
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<210> 3932

<211> 293

<212> PRT

<213> Homo sapiens

<400> 3932

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			20					25					30		
Cys	His	Tyr	Trp	Lys	Ser	Ser	Ser	Ile	Glu	Glu	Arg	Gly	Tyr	Trp	Gly
		35					40					45			
Ser	Gly	Ser	Ala	Ile	Met	Ala	Pro	Ala	Pro	Phe	Arg	Ser	Gln	Ser	Thr
	50					55					60				
Arg	Ser	Ser	Ile	Glu	Asp	Asp	Phe	Asn	Tyr	Gly	Ser	Ser	Val	Ala	Ser
65					70					75					80
Ala	Thr	Val	His	Ile	Arg	Met	Ala	Phe	Leu	Arg	Lys	Val	Tyr	Ser	Ile
			85						90					95	
Leu	Ser	Leu	Gln	Val	Leu	Leu	Thr	Thr	Val	Thr	Ser	Thr	Val	Phe	Leu
			100					105					110		
Tyr	Phe	Glu	Ser	Val	Arg	Thr	Phe	Val	His	Glu	Ser	Pro	Ala	Leu	Ile
	115						120					125			
Leu	Leu	Phe	Ala	Leu	Gly	Ser	Leu	Gly	Leu	Ile	Phe	Ala	Leu	Thr	Leu
	130					135					140				
Asn	Arg	His	Lys	Tyr	Pro	Leu	Asn	Leu	Tyr	Leu	Leu	Phe	Gly	Phe	Thr
145					150					155					160
Leu	Leu	Glu	Ala	Leu	Thr	Val	Ala	Val	Val	Val	Thr	Phe	Tyr	Asp	Val
			165					170						175	
Tyr	Ile	Ile	Leu	Gln	Ala	Phe	Ile	Leu	Thr	Thr	Thr	Val	Phe	Phe	Gly
			180					185					190		
Leu	Thr	Val	Tyr	Thr	Leu	Gln	Ser	Lys	Lys	Asp	Phe	Ser	Lys	Phe	Gly
		195					200					205			
Ala	Gly	Leu	Phe	Ala	Leu	Leu	Trp	Ile	Leu	Cys	Leu	Ser	Gly	Phe	Leu
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Gly	Ala	Leu	Leu	Phe	Cys	Gly	Phe	Ile	Ile	Tyr	Asp	Thr	His	Ser	Leu
			245					250						255	
Met	His	Lys	Leu	Ser	Pro	Glu	Glu	Tyr	Val	Leu	Ala	Ala	Ile	Ser	Leu
			260					265					270		
Tyr	Leu	Asp	Ile	Ile	Asn	Leu	Phe	Leu	His	Leu	Leu	Arg	Phe	Leu	Glu
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<210> 3933

<211> 4082

<212> DNA

<213> Homo sapiens

<400> 3933

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<210> 3934

<211> 130

<212> PRT

<213> Homo sapiens

<400> 3934

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			20					25					30		
Ala	Ala	Gly	Thr	Ser	Ser	Pro	Ile	Arg	Pro	Val	Ser	Ser	Pro	Val	Leu
		35					40					45			
Ser	Ser	Ser	Asn	Lys	Ser	Pro	Ser	Ser	Ala	Trp	Ser	Ser	Ser	Ser	Trp
	50					55					60				
His	Gly	Arg	Ile	Lys	Gly	Gly	Met	Lys	Gly	Phe	Gln	Ser	Phe	Met	Val
65				70						75				80	
Ser	Asp	Ser	Asn	Met	Ser	Phe	Val	Glu	Phe	Val	Glu	Leu	Phe	Lys	Ser
			85					90					95		
Phe	Ser	Val	Arg	Ser	Arg	Lys	Asp	Leu	Lys	Asp	Leu	Phe	Asp	Xaa	Leu

	100		105		110										
Cys	Ser	Ala	Leu	Gln	Pro	Xaa	Leu	Ala	Pro	Ser	Gln	Pro	His	Ser	Thr
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<210> 3935

<211> 1103

<212> DNA

<213> Homo sapiens

<400> 3935

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<210> 3936

<211> 265

<212> PRT

<213> Homo sapiens

<400> 3936

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Val Arg Ala His Gly Asp Pro Val Ser Glu Ser Phe Val Gln Arg Val
 35           40           45
Tyr Gln Pro Phe Leu Thr Thr Cys Asp Gly His Arg Ala Cys Ser Thr
 50           55           60
Tyr Arg Thr Ile Tyr Arg Thr Ala Tyr Arg Arg Ser Pro Gly Leu Ala
 65           70           75           80
Pro Ala Arg Pro Arg Tyr Ala Cys Cys Pro Gly Trp Lys Arg Thr Ser
 85           90           95
Gly Leu Pro Gly Ala Cys Gly Ala Ala Ile Cys Gln Pro Pro Cys Arg
 100          105          110
Asn Gly Gly Ser Cys Val Gln Pro Gly Arg Cys Arg Cys Pro Ala Gly
 115          120          125
Trp Arg Gly Asp Thr Cys Gln Ser Asp Val Asp Glu Cys Ser Ala Arg
 130          135          140
Arg Gly Gly Cys Pro Gln Arg Cys Val Asn Thr Ala Gly Ser Tyr Trp
 145          150          155          160
Cys Gln Cys Trp Glu Gly His Ser Leu Ser Ala Asp Gly Thr Leu Cys
 165          170          175
Val Pro Lys Gly Gly Pro Pro Arg Val Ala Pro Asn Pro Thr Gly Lys
 180          185          190
Gln Pro Trp Leu Cys Leu Ala Trp Gly Gly Gly Gln Ala Val Asp Ile
 195          200          205
Ala Val Trp Leu Leu Gly Met Val Gly Gly Thr Gly Ile Trp Ala Glu
 210          215          220
Gly Gly Gly Asp Ser Leu Ser Arg Glu Gly Gly Trp Gly Gly Arg Ile
 225          230          235          240
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<210> 3937

<211> 744

<212> DNA

<213> Homo sapiens

<400> 3937

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300

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 420
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<210> 3938

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3938

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			20					25					30		
Arg	Arg	Gly	Trp	Arg	Gly	Leu	Arg	Ala	Pro	Arg	Tyr	Arg	Asp	Pro	Gly
		35				40						45			
Arg	Ala	Ala	Glu	Ala	Gly	Asn	Ala	Lys	Gly	Asp	Ala	Thr	Ala	Gly	Pro
	50					55				60					
Lys	Glu	Gln	Gly	Gly	Gly	Gly	Gln	Asp	Pro	Ala	Ala	Ile	Ala	Gly	His
65				70					75					80	
Ser	Ala	Gly	Gly	Ser	Asp	His	Ala	Gly	Glu	Arg	Gly	Leu	Xaa	Gly	Arg
			85					90						95	
Thr	Gly	Trp	Leu	Ala	Ala	Lys	Ala	Ala	Pro	Ala	Gly	Gly	His	Arg	Glu
			100					105					110		
Thr	Gly	Leu	Ala	Ser	Val	Gly	Ala	Gly	Pro	Trp	Leu	Gly	Arg	Arg	Asn
		115					120					125			
Pro	Arg	Gln	Pro	Phe	Ser	Phe	Val	Gly	Pro	Ala	Glu	Ser	Pro	Asp	Arg
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<210> 3939

<211> 490

<212> DNA

<213> Homo sapiens

<400> 3939

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<210> 3940

<211> 62

<212> PRT

<213> Homo sapiens

<400> 3940

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Thr	Asp	Arg	Gln	Thr	Gly	Lys	Val	Arg	Trp	Lys	His	Thr	Glu	Asp	Glu
			20					25					30		
Arg	Asp	Arg	Gln	Trp	Glu	Ala	Glu	Leu	Lys	Thr	Val	Lys	Glu	Arg	Ala
		35					40					45			
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<210> 3941

<211> 2077

<212> DNA

<213> Homo sapiens

<400> 3941

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2077

<210> 3942

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<400> 3943
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aatttgctga acatctttat ctcaaattct ggaattgaaa aggcatttct atttgatgtg
900

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<210> 3944

<211> 435

<212> PRT

<213> Homo sapiens

<400> 3944

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			20					25					30		
Val	Gly	Thr	Met	Ser	Gln	Val	Leu	Gly	Lys	Pro	Gln	Pro	Gln	Asp	Glu
		35					40				45				
Asp	Asp	Ala	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Glu	Leu	Val	Gly	Leu	Ala
	50				55						60				
Asp	Tyr	Gly	Asp	Gly	Pro	Asp	Ser	Ser	Asp	Ala	Asp	Pro	Asp	Ser	Gly
65					70					75				80	
Thr	Glu	Glu	Gly	Val	Leu	Asp	Phe	Ser	Asp	Pro	Phe	Ser	Thr	Glu	Val
			85					90					95		
Lys	Pro	Arg	Ile	Leu	Leu	Met	Gly	Leu	Arg	Arg	Ser	Gly	Lys	Ser	Ser
			100					105					110		
Ile	Gln	Lys	Val	Val	Phe	His	Lys	Met	Ser	Pro	Asn	Glu	Thr	Leu	Phe
	115						120					125			
Leu	Glu	Ser	Thr	Asn	Lys	Ile	Cys	Arg	Glu	Asp	Val	Ser	Asn	Ser	Ser
	130				135						140				
Phe	Val	Asn	Phe	Gln	Ile	Trp	Asp	Phe	Pro	Gly	Gln	Ile	Asp	Phe	Phe
145				150					155					160	
Asp	Pro	Thr	Phe	Asp	Tyr	Glu	Met	Ile	Phe	Arg	Gly	Thr	Gly	Ala	Leu
			165					170					175		
Ile	Phe	Val	Ile	Asp	Ala	Gln	Asp	Asp	Tyr	Met	Glu	Ala	Leu	Thr	Arg
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420
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480

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<210> 3946

<211> 165

<212> PRT

<213> Homo sapiens

<400> 3946

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Gly	Ser	Ser	Gly	Gly	His	His	Arg	Ser	Gly	Asp	Pro	Gly	Leu	Ala	Ala
			20					25					30		
Gly	Leu	Gln	His	His	Lys	Ala	Val	Gly	Pro	Gly	His	Leu	Gln	His	Leu
		35					40					45			
Thr	Glu	Leu	Arg	Leu	Arg	Gln	Arg	Asp	Leu	Leu	Glu	Gln	Arg	Val	Gln
	50					55					60				
Gly	His	Ala	Ala	Pro	Val	Gly	Ala	Gln	Asp	Phe	Gly	Asp	Glu	Ala	Ala
65					70					75				80	
His	Leu	Arg	Val	Arg	His	Gly	Ala	Leu	Ala	Val	Leu	Ala	Leu	Pro	Arg
			85					90					95		
Arg	Gly	Thr	Arg	Phe	Arg	Gly	Asn	Arg	Lys	Ser	Lys	Leu	Thr	Ser	Val
		100						105					110		
Gln	Gly	Arg	Ala	Arg	Ala	Val	Leu	Leu	Leu	Gly	Ala	Pro	Gly	Val	Ser
		115					120					125			
Glu	Gly	Ala	Leu	Ser	Val	Ala	Val	Ser	Pro	Ala	Gln	Arg	Ser	Thr	Leu
	130					135					140				
Gly	Ser	Gln	Val	Lys	Arg	Leu	Asp	Leu	Thr	Asp	Arg	Val	Leu	Val	Ala
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<210> 3947

<211> 400

<212> DNA

<213> Homo sapiens

<400> 3947

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 240
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 300

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<210> 3948

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3948

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Phe	Cys	Thr	Phe	Ile	Thr	Phe	Leu	Gln	Pro	Val	Val	Asn	Gly	Glu	Leu
			20					25					30		
Thr	Met	Leu	Gly	Glu	Ile	Thr	His	Leu	Gln	Gly	Ile	Ile	Asp	Asp	Leu
			35				40					45			
Val	Val	Leu	Thr	Ala	Glu	Pro	His	Lys	Leu	Pro	Pro	Ala	Ser	Glu	Gln
			50				55				60				
Val	Ile	Lys	Asp	Leu	Lys	Gly	Ser	Asp	Tyr	Ser	Trp	Ser	Tyr	Gln	Thr
65					70					75				80	
Pro	Pro	Ser	Ser	Pro	Ser	Ser	Ser	Ser	Ser	Arg	Lys	Ser	Ser	Met	Cys
			85					90					95		
Ser	Ala	Pro	Ser	Ser	Ser	Ser	Ser	Ala	Lys	Gly	Gly	Gly	Ser	Pro	Met
			100					105					110		
Ala	Trp	Gly	Cys	Pro	Asn	Ile	Leu	Thr	Gln	Phe	His	Leu	Ser	Leu	Pro
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<210> 3949

<211> 1462

<212> DNA

<213> Homo sapiens

<400> 3949

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 120
 ccaccatctt tctggctgca agagtcaggg gtcagaatgg ggggcagcca ccactgctga
 180
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 240
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 300
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 360
 gtcacttcac agaaaaatat ataggtgctg ttttgccttg gaagccagac agatcagaat
 420
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 480
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 540

atcactgagc tgcaccaccc ttttcttctc cattgctttc aagagctcat acttatagtg
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 ctccacttct tttgcggtgc tgacaagcac agcaacatcc tttggagaat agcccctatc
 660
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 720
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 780
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 960
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<210> 3950

<211> 351

<212> PRT

<213> Homo sapiens

<400> 3950

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			20					25					30		
Ala	Gln	Gln	Tyr	Glu	Ile	Phe	Ser	Arg	Ser	Leu	Arg	Lys	Asn	Arg	Glu
		35					40					45			
Leu	Phe	Val	His	Gly	Leu	Pro	Gly	Ser	Gly	Lys	Asn	Ile	Met	Ala	Met
	50					55					60				
Lys	Ile	Met	Glu	Lys	Ile	Arg	Asn	Val	Phe	His	Cys	Glu	Ala	His	Arg
65					70				75					80	
Ile	Leu	Tyr	Val	Cys	Glu	Asn	Gln	Pro	Leu	Arg	Asn	Phe	Ile	Ser	Asp
			85					90					95		
Arg	Asn	Ile	Cys	Arg	Ala	Glu	Thr	Arg	Glu	Thr	Phe	Leu	Arg	Glu	Lys
		100						105				110			
Phe	Glu	His	Ile	Gln	His	Ile	Val	Ile	Asp	Glu	Ala	Gln	Asn	Phe	Arg

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120
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180
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300
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gagaacagca cgaccctgca cgtgcgggcc ctgctgcagc agcaggacac cctggcgacc
540
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 780
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 900
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<210> 3952

<211> 188

<212> PRT

<213> Homo sapiens

<400> 3952

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Thr	Val	Val	Thr	Ser	Cys	Gln	Pro	Lys	Asn	Pro	Arg	Glu	Leu	His	Arg
			20					25					30		
Arg	Arg	Lys	Leu	Asp	Pro	Gly	Lys	Met	His	Ala	Lys	Ile	Trp	Leu	Met
		35					40					45			
Lys	Thr	Ser	Leu	Arg	Ser	Gly	Arg	Ala	Ala	Leu	Arg	Glu	Leu	Arg	Ser
	50					55					60				
Arg	Glu	Asn	Phe	Leu	Ser	Lys	Leu	Asn	Arg	Glu	Leu	Ile	Glu	Thr	Ile
65					70				75						80
Gln	Glu	Met	Glu	Asn	Ser	Thr	Thr	Leu	His	Val	Arg	Ala	Leu	Leu	Gln
				85					90					95	
Gln	Gln	Asp	Thr	Leu	Ala	Thr	Ile	Ile	Asp	Ile	Leu	Glu	Tyr	Ser	Asn
			100					105					110		
Lys	Lys	Arg	Leu	Gln	Gln	Leu	Lys	Ser	Glu	Leu	Gln	Glu	Trp	Glu	Glu
		115					120					125			
Lys	Lys	Lys	Cys	Lys	Met	Ser	Tyr	Leu	Glu	Gln	Gln	Ala	Glu	Gln	Leu
	130					135						140			
Asn	Ala	Lys	Ile	Glu	Lys	Thr	Gln	Glu	Glu	Val	Asn	Phe	Leu	Ser	Thr
145					150					155					160
Tyr	Met	Asp	His	Glu	Tyr	Ser	Ile	Lys	Ser	Val	Gln	Ile	Ser	Thr	Leu
			165					170						175	
Met	Arg	His	Cys	Ser	Arg	Leu	Arg	Thr	Ala	Ser	Arg				
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<210> 3953

<211> 2900

<212> DNA

<213> Homo sapiens

<400> 3953

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2760
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<210> 3954

<211> 627

<212> PRT

<213> Homo sapiens

<400> 3954

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 485 490 495
 Leu Ser Ser Leu Pro Pro Trp Ala Val Thr Leu Leu Ala Cys Ile Leu
 500 505 510
 Val Ser Ile Val Thr Glu Phe Val Ser Asn Pro Ala Thr Ile Thr Ile
 515 520 525
 Phe Leu Pro Ile Leu Cys Ser Leu Ser Glu Thr Met His Ile Asn Pro
 530 535 540
 Leu Tyr Thr Leu Ile Pro Val Thr Met Cys Ile Ser Phe Ala Val Met
 545 550 555 560
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 565 570 575
 Cys Gln Ile Lys Asp Met Val Lys Ala Gly Leu Gly Val Asn Val Ile
 580 585 590
 Gly Leu Val Ile Val Met Val Ala Ile Asn Thr Trp Gly Val Ser Leu
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 Asp Gln Ala
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<210> 3955

<211> 522

<212> DNA

<213> Homo sapiens

<400> 3955

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<210> 3956

<211> 174

<212> PRT

<213> Homo sapiens

<400> 3956

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 Lys Glu Val Ser Ser Ser Glu Asn Pro Ser Ser His Ser Lys Val Arg
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 Ser Val Ile Met Val Val Phe Ala Glu Asp Lys Ser Arg Glu Asp Gln
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 Leu Arg His Trp Lys Tyr Trp His Ser Arg Gln His Thr Ala Lys Gln
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 Arg Cys Ile Asp Ile Ala Asp Tyr Lys Glu Ser Phe Asn Thr Ile Ser
 100 105 110
 Asn Ile Glu Glu Ile Ala Tyr Asn Ala Ile Ser Phe Thr Trp Asp Ile
 115 120 125
 Asn Asp Glu Ala Lys Val Phe Ile Ser Val Asn Cys Leu Ser Thr Asp
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<210> 3957

<211> 3891

<212> DNA

<213> Homo sapiens

<400> 3957

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<211> 440

<212> PRT

<213> Homo sapiens

<400> 3958

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Thr Glu Pro Ala Gln Ala Gln Lys Cys Tyr Arg Asp Leu Ala Leu Val
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Ser Arg Asp Gly Met Asn Ile Val Leu Asn Lys Ile Asn Gln Ile Leu
          50           55           60
Met Glu Lys Tyr Leu Lys Leu Gln Asp Thr Cys Arg Thr Gln Leu Val
65           70           75           80
Trp Leu Val Arg Glu Leu Val Lys Ser Gly Val Leu Gly Ala Asp Gly
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Val Cys Met Thr Phe Met Lys Gln Ile Ala Gly Gly Asp Val Thr Ala
          100          105          110
Lys Asn Ile Trp Leu Ala Glu Ser Val Leu Asp Ile Leu Thr Glu Gln
          115          120          125
Arg Glu Trp Val Leu Lys Ser Ser Ile Leu Ile Ala Met Ala Val Tyr
          130          135          140
Thr Tyr Leu Arg Leu Ile Val Asp His His Gly Thr Ala Gln Leu Gln
145          150          155          160
Ala Leu Arg Gln Lys Glu Val Asp Phe Cys Ile Ser Leu Leu Arg Glu
          165          170          175
Arg Phe Met Glu Cys Leu Met Ile Gly Arg Asp Leu Val Arg Leu Leu
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Gln Asn Val Ala Arg Ile Pro Glu Phe Glu Leu Leu Trp Lys Asp Ile
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Pro Asp Met Glu Thr Lys Leu Leu Phe Met Thr Ser Arg Val Arg Phe
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Gly Gln Gln Lys Arg Tyr Gln Asp Trp Phe Gln Arg Gln Tyr Leu Ser
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Thr Pro Asp Ser Gln Ser Leu Arg Cys Asp Leu Ile Arg Tyr Ile Cys
          275          280          285
Gly Val Val His Pro Ser Asn Glu Val Leu Ser Ser Asp Ile Leu Pro
          290          295          300
Arg Trp Ala Ile Ile Gly Trp Leu Leu Thr Thr Cys Thr Ser Asn Val
305          310          315          320
Ala Ala Ser Asn Ala Lys Leu Ala Leu Phe Tyr Asp Trp Leu Phe Phe
          325          330          335
Ser Pro Asp Lys Asp Ser Ile Met Asn Ile Glu Pro Ala Ile Leu Val
          340          345          350
Met His His Ser Met Lys Pro His Pro Ala Ile Thr Ala Thr Leu Leu
          355          360          365
Asp Phe Met Cys Arg Ile Ile Pro Asn Phe Tyr Pro Pro Leu Glu Gly
          370          375          380
His Val Arg Gln Gly Val Phe Ser Ser Leu Asn His Ile Val Glu Lys

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385 390 395 400
 Arg Val Leu Ala Cys Lys Lys Tyr Trp Leu Tyr Leu Arg Leu Leu Gly
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 Thr Lys Thr Pro Ser Ser Pro Val
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<210> 3959
 <211> 752
 <212> DNA
 <213> Homo sapiens

<400> 3959
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<210> 3960
 <211> 94
 <212> PRT
 <213> Homo sapiens

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 Ser Lys Tyr Gly Ser Gln Phe Gln Gly Asn Ser Gln His Asp Ala Leu
 35 40 45
 Glu Phe Leu Leu Trp Leu Leu Asp Arg Val His Glu Asp Leu Glu Gly

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Ser Ser Arg Trp Ala Arg Cys Arg Arg Ser Phe Arg Leu Lys Pro Leu				
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Lys Pro Leu Arg Thr Ala Cys His His Gln Leu Ser Phe Leu				80
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<210> 3961

<211> 2505

<212> DNA

<213> Homo sapiens

<400> 3961

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1260

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<210> 3962

<211> 306

<212> PRT

<213> Homo sapiens

<400> 3962

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			20					25					30		
Thr	Val	Met	Tyr	Ile	Cys	His	Pro	Glu	Ser	Lys	His	Glu	Ile	Leu	Ser

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 Leu Leu Cys Ser His Pro Lys Tyr Arg Phe Arg Ala Ser Pro Val Asn
 65 70 75 80
 Asp Ile Phe Cys Gln Ser Leu Pro Gly Ser Pro Phe Lys Pro Leu Thr
 85 90 95
 Leu Arg Gln Leu Glu Gln Gln Glu Glu Ile Leu Arg Val Pro Phe Arg
 100 105 110
 Arg Asn Lys Glu Glu Asp Leu Gln Ser Thr Lys Glu Glu Arg Phe Pro
 115 120 125
 Ala Ile His Lys Ser Ile Ala Ile Gly Ser Gln Pro Val Leu Thr Val
 130 135 140
 Gly Thr Thr His Ile Ser Lys Leu Thr Asp Asp Gln Leu Ile Lys Glu
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 165 170 175
 Tyr Glu Phe Cys Tyr Gly Lys His Val His Gln Tyr His Glu Asp Lys
 180 185 190
 Asp Ser Gly Lys Thr Ser Val Val Val Gly Thr Trp Asn Gln Glu Glu
 195 200 205
 His Ile Glu Trp Ala Lys Lys Asn Thr Ala Arg Ala Tyr His Leu Gln
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 Asp Asp Gly Thr Gln Thr Val Arg Met Val Ser His Phe Tyr Gly Asn
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 Gly Asp Ile Cys Asp Ile Thr Asp Lys Pro Arg Gln Val Thr Val Lys
 245 250 255
 Leu Lys Cys Lys Glu Ser Asp Ser Pro His Ala Val Thr Val Tyr Met
 260 265 270
 Leu Glu Pro His Ser Cys Gln Tyr Ile Leu Gly Val Glu Ser Pro Val
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<210> 3963

<211> 1513

<212> DNA

<213> Homo sapiens

<400> 3963

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<210> 3964

<211> 436

<212> PRT

<213> Homo sapiens

<400> 3964

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			20					25					30		
Gln	Phe	Ser	Asn	Ile	Ser	Phe	Ser	Arg	Asp	Ser	Pro	Glu	Glu	Asn	Val
		35					40					45			
Gln	Ser	Asn	Lys	Met	Asp	Leu	Ser	Gly	Gly	Met	Leu	Gln	Asp	Lys	Arg

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65	70	75
Val Gly Lys Gly Pro Gly Ser Arg Pro Gln Ile Ser Lys Glu Ser Ser		
	85	90
Met Glu Arg Asn Pro Tyr Phe Asp Lys Asn Gly Asn Pro Ser Met Phe		
	100	105
Gly Val Gly Asn Thr Ala Ala Gln Pro Arg Gly Met Gln Gln Pro Pro		
	115	120
Ala Gln Pro Leu Ser Ser Ser Gln Pro Asn Leu Arg Ala Gln Val Pro		
	130	135
Pro Pro Leu Leu Ser Pro Gln Val Pro Val Ser Leu Leu Lys Tyr Ala		
	145	150
Pro Asn Asn Gly Gly Leu Asn Pro Leu Phe Gly Pro Gln Gln Val Ala		
	165	170
Met Leu Asn Gln Leu Ser Gln Leu Asn Gln Leu Ser Gln Ile Ser Gln		
	180	185
Leu Gln Arg Leu Leu Ala Gln Gln Gln Arg Ala Gln Ser Gln Arg Ser		
	195	200
Val Pro Ser Gly Asn Arg Pro Gln Gln Asp Gln Gln Gly Arg Pro Leu		
	210	215
Ser Val Gln Gln Gln Met Met Gln Gln Ser Arg Gln Leu Asp Pro Asn		
	225	230
Leu Leu Val Lys Gln Gln Thr Pro Pro Ser Gln Gln Gln Pro Leu His		
	245	250
Gln Pro Ala Met Lys Ser Phe Leu Asp Asn Val Met Pro His Thr Thr		
	260	265
Pro Glu Leu Gln Lys Gly Pro Ser Pro Ile Asn Ala Phe Ser Asn Phe		
	275	280
Pro Ile Gly Leu Asn Ser Asn Leu Asn Val Asn Met Asp Met Asn Ser		
	290	295
Ile Lys Glu Pro Gln Ser Arg Leu Arg Lys Trp Thr Thr Val Asp Ser		
	305	310
Ile Ser Val Asn Thr Ser Leu Asp Gln Asn Ser Ser Lys His Gly Ala		
	325	330
Ile Ser Ser Gly Phe Arg Leu Glu Glu Ser Pro Phe Val Pro Tyr Asp		
	340	345
Phe Met Asn Ser Ser Thr Ser Pro Ala Ser Pro Pro Gly Ser Ile Gly		
	355	360
Asp Gly Trp Pro Arg Ala Lys Ser Pro Asn Gly Ser Ser Ser Val Asn		
	370	375
Trp Pro Pro Glu Phe Arg Pro Gly Glu Pro Trp Lys Gly Tyr Pro Asn		
	385	390
Ile Asp Pro Glu Thr Asp Pro Tyr Val Thr Pro Gly Ser Val Ile Asn		
	405	410
Asn Leu Pro Ile Asn Thr Val Arg Glu Val Asp His Leu Arg Asp Arg		
	420	425
Asn Ser Gly Thr		430
435		

<210> 3965

<211> 2850

<212> DNA

<213> Homo sapiens

<400> 3965
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180
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240
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300
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360
taccgggacg tgatgcggga gaccttcggc cacctgggcg cgctgggtga ggccggggccc
420
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480
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540
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600
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660
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720
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780
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840
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900
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1560

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1620
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1800
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1860
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1920
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2100
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2160
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2220
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2280
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2340
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2400
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2460
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2520
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2700
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2760
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2820
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2850

<210> 3966

<211> 782

<212> PRT

<213> Homo sapiens

<400> 3966

Met	Gly	Pro	Pro	Leu	Ala	Pro	Arg	Pro	Ala	His	Val	Pro	Gly	Glu	Ala
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Gly	Pro	Arg	Arg	Thr	Arg	Glu	Ser	Arg	Pro	Gly	Ala	Val	Ser	Phe	Ala

3128

450		455		460											
Gly	Pro	Tyr	Ile	Phe	Leu	Glu	Gly	Lys	Lys	Pro	Leu	Leu	Tyr	Phe	Pro
465					470					475					480
Asp	Thr	Pro	Pro	Pro	Pro	Leu	Glu	Lys	Ala	Ala	Glu	Ala	Ala	Leu	Phe
				485					490					495	
Lys	Gly	Lys	Trp	Asp	Asp	Glu	Ala	Arg	Glu	Met	Ala	Pro	Pro	Pro	Ala
			500					505					510		
Pro	Leu	Leu	Ala	Pro	Arg	Pro	Gly	Glu	Thr	Arg	Pro	Gly	Cys	Arg	Lys
		515					520					525			
Pro	Gly	Thr	Val	Ser	Phe	Ala	Asp	Val	Ala	Val	Tyr	Phe	Ser	Pro	Glu
	530					535					540				
Glu	Trp	Gly	Cys	Leu	Arg	Pro	Ala	Gln	Arg	Ala	Leu	Tyr	Arg	Asp	Val
545					550					555					560
Met	Gln	Glu	Thr	Tyr	Gly	His	Leu	Gly	Ala	Leu	Gly	Phe	Pro	Gly	Pro
				565				570						575	
Lys	Pro	Ala	Leu	Ile	Ser	Trp	Met	Glu	Gln	Glu	Ser	Glu	Ala	Trp	Ser
			580					585					590		
Pro	Ala	Ala	Gln	Asp	Pro	Glu	Lys	Gly	Glu	Arg	Leu	Gly	Gly	Ala	Arg
		595					600					605			
Arg	Gly	Asp	Val	Pro	Asn	Arg	Lys	Glu	Glu	Glu	Pro	Glu	Glu	Val	Pro
	610					615					620				
Arg	Ala	Lys	Gly	Pro	Arg	Lys	Ala	Pro	Val	Lys	Glu	Ser	Pro	Glu	Val
625					630					635					640
Leu	Val	Glu	Arg	Asn	Pro	Asp	Pro	Ala	Ile	Ser	Val	Ala	Pro	Ala	Arg
				645					650					655	
Ala	Gln	Pro	Pro	Lys	Asn	Ala	Ala	Trp	Asp	Pro	Thr	Thr	Gly	Ala	Gln
		660						665					670		
Pro	Pro	Ala	Pro	Ile	Pro	Ser	Met	Asp	Ala	Gln	Ala	Gly	Gln	Arg	Arg
		675					680					685			
His	Val	Cys	Thr	Asp	Cys	Gly	Arg	Arg	Phe	Thr	Tyr	Pro	Ser	Leu	Leu
	690					695					700				
Val	Ser	His	Arg	Arg	Met	His	Ser	Gly	Glu	Arg	Pro	Phe	Pro	Cys	Pro
705					710				715						720
Glu	Cys	Gly	Met	Arg	Phe	Lys	Arg	Lys	Phe	Ala	Val	Glu	Ala	His	Gln
			725						730					735	
Trp	Ile	His	Arg	Ser	Cys	Ser	Gly	Gly	Arg	Arg	Gly	Arg	Arg	Pro	Gly
		740						745					750		
Ile	Arg	Ala	Val	Pro	Arg	Ala	Pro	Val	Arg	Gly	Asp	Arg	Asp	Pro	Pro
	755					760					765				
Val	Leu	Phe	Arg	His	Tyr	Pro	Asp	Ile	Phe	Glu	Glu	Cys	Gly		
	770					775					780				

<210> 3967

<211> 892

<212> DNA

<213> Homo sapiens

<400> 3967

nacccggccc gaccccggcg cgcgcgcggc ggaggacgag gaagagttgt ggcgaggcag
60

atcctgcccc gtggccgcgg ccgtctcgta ggggacaccg tggtgtttta ggatggccag
120

tactggatcc gaggcggac ctcaagtggac atcatcaaga ctggaggcta caaggtcagc
180

gccctggagg tggagtggca cctgctggcc caccacagca tcacagatgt ggctgtgatt
240
ggagttccgg atatgacatg gggccagcgg gtcactgctg tggtgaccct ccgagaagga
300
cactcactgt cccacaggga gctcaaagag tgggcccagaa atgtcctggc cccgtacgcg
360
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420
aagaaggcgc tcacagggca cttccacccc tcatgaccgc gcagactggg actgcggggtc
480
tgggtggggag cagcagacgt ccccttcaca ccgagaacca cggggggccc tccaagacct
540
ggcctccctt aaacctgaac cccccaatc aggtcacgta gaatcaagaa ctgtttggga
600
tgaaatcacc atgtgggggtc cccagcctcg ggccagttgt tgcagctcaa ggagaccgtc
660
cctggtgtca cctctgcctg gtcaccgccc acctcatctg tgcagcgcgg tgcagccagc
720
ccctggcccc acgtgctgag gcacctccc cccacagtg ccctgcagtt gccaggctct
780
ccagggcagg tcccagaggt ttcccacaaa aaacaaataa agactccact ggaggaaaca
840
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa
892

<210> 3968
<211> 151
<212> PRT
<213> Homo sapiens

<400> 3968
Xaa Pro Ala Arg Pro Arg Arg Ala Arg Gly Gly Gly Arg Gly Arg Val
1 5 10 15
Val Ala Arg Gln Ile Leu Pro Arg Gly Arg Gly Arg Leu Val Gly Asp
20 25 30
Thr Val Val Phe Lys Asp Gly Gln Tyr Trp Ile Arg Gly Arg Thr Ser
35 40 45
Val Asp Ile Ile Lys Thr Gly Gly Tyr Lys Val Ser Ala Leu Glu Val
50 55 60
Glu Trp His Leu Leu Ala His Pro Ser Ile Thr Asp Val Ala Val Ile
65 70 75 80
Gly Val Pro Asp Met Thr Trp Gly Gln Arg Val Thr Ala Val Val Thr
85 90 95
Leu Arg Glu Gly His Ser Leu Ser His Arg Glu Leu Lys Glu Trp Ala
100 105 110
Arg Asn Val Leu Ala Pro Tyr Ala Val Pro Ser Glu Leu Val Leu Val
115 120 125
Glu Glu Ile Pro Arg Asn Gln Met Gly Lys Ile Asp Lys Lys Ala Leu
130 135 140
Ile Arg His Phe His Pro Ser
145 150

<210> 3969
<211> 915

<212> DNA

<213> Homo sapiens

<400> 3969

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gtgagtacgg ggcggggagg aggcattgtg gaggtctctt gcctgtacgc tggaaagtgg
120
ggattgcaac tcggggaggg atggagcacg cgtcgtcgcc tgggaaacgg gtcgacccgc
180
ggaaggcgag cgggtgggac ttccggagca gttaatgggtg gggaaacttt ctagtggatg
240
tgggaggagg cgggacttcc tgcagcaa at tggggctgtg cgccgctcaa gcccgtttac
300
ctgctcccca ggccggcacc caggatgggc gaggtggagg ccccgggccg cttgtggctc
360
gagagcccc ctgggggagc gccccccatc ttcttgcctt cggacgggca agccctggtc
420
ctgggcaggg gaccctgac ccaggttacg gaccggaagt gctccagaac tcaagtggag
480
ctggtcgcag atcctgagac ccggacagtg gcagtgaac aggtatcagt gcctctgcaa
540
gggccagcaa ggcttgggga tgggatttgg ggaggaattg caagccgtca gtgaaggggt
600
acattaggaa aatctgattg gggccgggag tgggtggctca agcctgtaat cccagcactt
660
tgggaggccg aggcgggagg atcgcttgaa cccaggagtt cgagaccagc ctgagcgaca
720
tgggtgaaacc tgtctctcta aaaaattagc gggaatgggtg gcgcgtcctt gtagttccta
780
atcgggaggc tgaagcggga ggatcccttg agcccagtag gtcaaggggtg tagtgagcag
840
tgatcaccac actgtacttc agcctgggtg acagagcgag aacctgtctc aaaaaaagaa
900
aagaaaaaat atggc
915

<210> 3970

<211> 89

<212> PRT

<213> Homo sapiens

<400> 3970

Met	Gly	Glu	Val	Glu	Ala	Pro	Gly	Arg	Leu	Trp	Leu	Glu	Ser	Pro	Pro
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Gly	Gly	Ala	Pro	Pro	Ile	Phe	Leu	Pro	Ser	Asp	Gly	Gln	Ala	Leu	Val
			20					25					30		
Leu	Gly	Arg	Gly	Pro	Leu	Thr	Gln	Val	Thr	Asp	Arg	Lys	Cys	Ser	Arg
		35					40					45			
Thr	Gln	Val	Glu	Leu	Val	Ala	Asp	Pro	Glu	Thr	Arg	Thr	Val	Ala	Val
	50					55					60				
Lys	Gln	Val	Ser	Val	Pro	Leu	Gln	Gly	Pro	Ala	Arg	Pro	Gly	Asp	Gly
65					70				75					80	
Ile	Trp	Gly	Gly	Ile	Ala	Ser	Arg	Gln							

85

<210> 3971
 <211> 433
 <212> DNA
 <213> Homo sapiens

<400> 3971
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 gacagatatg tggattataag agctctggga aaaaaatgga gcatggaagg gagagcccgg
 120
 ctggggaacg ggtaatcaga gaaaccctca ctcatagggt ggtgcccttt atgcagagac
 180
 ttaaaggaag gagggagggt ccctgacaga gagaatggta agtgcaaagg tcctgggtgg
 240
 gcttggtgttg aggaagagca aggccagtgt ggctggaaca gaggagagaga
 300
 gttgtaagca atgagcttag acaggaaatg gggctctggtt cacatgggaa atggtaggac
 360
 attgtccgaa cttgggcttt tactccgggt gaaatgggca ctctataga tgctcccgtc
 420
 ctaatcacca gaa
 433

<210> 3972
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 3972
 Met Ser Tyr His Phe Pro Cys Glu Pro Asp Pro Ile Ser Cys Leu Ser
 1 5 10 15
 Ser Leu Leu Thr Thr Leu Ser Pro Ser Leu Thr Leu Phe Gln Pro His
 20 25 30
 Trp Pro Cys Ser Ser Ser Thr Gln Ala His Pro Gly Pro Leu His Leu
 35 40 45
 Pro Phe Ser Leu Ser Gly Asp Leu Pro Pro Ser Phe Lys Ser Leu His
 50 55 60
 Lys Gly His His Pro Met Ser Glu Gly Phe Ser Asp Tyr Pro Phe Pro
 65 70 75 80
 Ser Arg Ala Leu Pro Ser Met Leu His Phe Phe Pro Arg Ala Leu Asn
 85 90 95
 Thr Thr Tyr Leu Ser Phe Ile Phe Ser Leu Ser Phe Phe Cys Leu Leu
 100 105 110
 Pro Leu Glu His His Gln Ser Arg
 115 120

<210> 3973
 <211> 984
 <212> DNA
 <213> Homo sapiens

<400> 3973

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 120
 tgctccacct acttgcagtc cagatattac agggcccctg agatcatcct tggtttacca
 180
 ttttgtgagg caattgacat gtggtccctg ggctgtgtta ttgcagaatt gttcctgggt
 240
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 300
 ggtttgctg ctgaatatattt attaagcgcc gggacaaaga caactagggtt tttcaaccgt
 360
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 420
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 480
 caggtgaaca tgacgacaga tttggaaggg agcgacatgt tggtagaaaa ggctgaccgg
 540
 cgggagttca ttgacctgtt gaagaagatg ctgaccattg atgctgacaa gagaatcact
 600
 ccaatcgaaa ccttgaacca tccctttgtc accatgacac acttactcga ttttccccac
 660
 agcacacacg tcaaatacatg tttccagaac atggagatct gcaagcgtcg ggtgaatatg
 720
 tatgacacgg tgaaccagag caaaaccctt ttcatacgc acgtggcccc cagcacgtcc
 780
 accaacctga ccatgacctt taacaaccag ctgaccactg tccacaacca gccctcagcg
 840
 gcatccatgg ctgcagcggc ccagcggagc atgcccctgc agacaggaac agcccagatt
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 960
 ttgcaggcct ctcccttcac gcgt
 984

<210> 3974

<211> 328

<212> PRT

<213> Homo sapiens

<400> 3974

Leu	Gly	Leu	Ile	His	Ala	Asp	Leu	Lys	Pro	Glu	Asn	Ile	Met	Leu	Val
1				5					10					15	
Asp	Pro	Ser	Arg	Gln	Pro	Tyr	Arg	Val	Lys	Val	Ile	Asp	Phe	Gly	Ser
			20					25					30		
Ala	Ser	His	Val	Ser	Lys	Ala	Val	Cys	Ser	Thr	Tyr	Leu	Gln	Ser	Arg
		35					40					45			
Tyr	Tyr	Arg	Ala	Pro	Glu	Ile	Ile	Leu	Gly	Leu	Pro	Phe	Cys	Glu	Ala
	50					55				60					
Ile	Asp	Met	Trp	Ser	Leu	Gly	Cys	Val	Ile	Ala	Glu	Leu	Phe	Leu	Gly
65					70					75				80	
Trp	Pro	Leu	Tyr	Pro	Gly	Ala	Ser	Glu	Tyr	Asp	Gln	Ile	Arg	Tyr	Ile
				85					90					95	
Ser	Gln	Thr	Gln	Gly	Leu	Pro	Ala	Glu	Tyr	Leu	Leu	Ser	Ala	Gly	Thr

			100					105					110				
Lys	Thr	Thr	Arg	Phe	Phe	Asn	Arg	Asp	Thr	Asp	Ser	Pro	Tyr	Pro	Leu		
			115					120					125				
Trp	Arg	Leu	Lys	Thr	Pro	Asp	Asp	His	Glu	Ala	Glu	Thr	Gly	Ile	Lys		
			130					135					140				
Ser	Lys	Glu	Ala	Arg	Lys	Tyr	Ile	Phe	Asn	Cys	Leu	Asp	Asp	Met	Ala		
145						150				155					160		
Gln	Val	Asn	Met	Thr	Thr	Asp	Leu	Glu	Gly	Ser	Asp	Met	Leu	Val	Glu		
				165					170						175		
Lys	Ala	Asp	Arg	Arg	Glu	Phe	Ile	Asp	Leu	Leu	Lys	Lys	Met	Leu	Thr		
			180					185					190				
Ile	Asp	Ala	Asp	Lys	Arg	Ile	Thr	Pro	Ile	Glu	Thr	Leu	Asn	His	Pro		
			195					200					205				
Phe	Val	Thr	Met	Thr	His	Leu	Leu	Asp	Phe	Pro	His	Ser	Thr	His	Val		
			210					215					220				
Lys	Ser	Cys	Phe	Gln	Asn	Met	Glu	Ile	Cys	Lys	Arg	Arg	Val	Asn	Met		
225						230					235				240		
Tyr	Asp	Thr	Val	Asn	Gln	Ser	Lys	Thr	Pro	Phe	Ile	Thr	His	Val	Ala		
				245					250					255			
Pro	Ser	Thr	Ser	Thr	Asn	Leu	Thr	Met	Thr	Phe	Asn	Asn	Gln	Leu	Thr		
			260					265					270				
Thr	Val	His	Asn	Gln	Pro	Ser	Ala	Ala	Ser	Met	Ala	Ala	Ala	Ala	Gln		
			275					280					285				
Arg	Ser	Met	Pro	Leu	Gln	Thr	Gly	Thr	Ala	Gln	Ile	Cys	Ala	Arg	Pro		
			290					295				300					
Asp	Pro	Phe	Gln	Gln	Ala	Leu	Ile	Val	Cys	Pro	Pro	Gly	Leu	Gln	Ala		
305					310					315					320		
Leu	Gln	Ala	Ser	Pro	Phe	Thr	Arg										
				325													

<210> 3975

<211> 593

<212> DNA

<213> Homo sapiens

<400> 3975

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cggccagcct ccaacctcct cacagggaga gcctccctct ccactctctc cccagggatg
120

gctcttgggg gctcaaggga gcctgggcct ctgccagcct gcaagctgcc tccaactctc
180

agtcaggatt tggatgcccc cagtgcagtc ctgaggccgc cgccccccat cctactatcc
240

tgcttctgag gcgtctcgga atcataggcc tcccgtggaa ggggagcagc aggcgaggtc
300

tgcgtgagcc ccacagatgc ccgctcgctt gccagactta aaagtctgtg cccctccccg
360

accaccaggg taccagatc ccaggcggct cagccaggcc cagagcccca agagctgggc
420

tggtctctcc aactgggatc tggggtaggg gctgctcccc caagtccctg ggggactgtc
480

tgggacatcc aggcctgtc ttcttgtctt aaccactcac aacagagaac acgatgttct
540

gtccacgaaa gaaggcccca cacttctccc atccggcctc cacgtaaacy cgt
593

<210> 3976

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3976

Met	Gly	Phe	Ser	Leu	Leu	Glu	Gly	Pro	Ala	Ser	Leu	Gln	Pro	Pro	His
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Arg	Glu	Ser	Leu	Pro	Leu	His	Ser	Leu	Pro	Arg	Asp	Gly	Ser	Trp	Gly
			20					25					30		
Leu	Lys	Gly	Ala	Trp	Ala	Ser	Ala	Ser	Leu	Gln	Ala	Ala	Ser	Asn	Ser
		35					40					45			
Gln	Ser	Gly	Phe	Gly	Cys	Pro	Gln	Cys	Ser	Pro	Glu	Ala	Ala	Ala	Pro
	50					55				60					
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Trp	Lys	Gly	Ser	Ser	Arg	Arg	Gly	Leu	Arg	Glu	Pro	His	Arg	Cys	Pro
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<210> 3977

<211> 2668

<212> DNA

<213> Homo sapiens

<400> 3977

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<210> 3978

<211> 667

<212> PRT

<213> Homo sapiens

<400> 3978

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Asp	Leu	Ala	Gln	Leu	Leu	Leu	Arg	Leu	Asp	Tyr	Asn	Lys	Tyr	Tyr	Thr	
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<210> 3979

<211> 2746

<212> DNA

<213> Homo sapiens

<400> 3979

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<210> 3980

<211> 478

<212> PRT

<213> Homo sapiens

<400> 3980

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			20					25					30		
Val	Ile	Phe	Leu	Leu	Phe	Met	Asn	Leu	Tyr	Ile	Glu	Asp	Ser	Tyr	Val
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Leu	Glu	Gly	Asp	Lys	Gln	Leu	Ile	Arg	Glu	Thr	Ser	Thr	His	Gln	Leu

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Gly Ala Ile Asn Val Thr Tyr Arg Tyr Leu Ala Ala Thr Pro Leu Gln		80
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Arg Lys Arg Tyr Leu Thr Ile Gly Leu Ser Ser Val Lys Arg Lys Lys		95
	100	105
Gly Asn Tyr Leu Leu Glu Thr Ile Lys Ser Ile Phe Glu Gln Ser Ser		110
	115	120
Tyr Glu Glu Leu Lys Glu Ile Ser Val Val Val His Leu Ala Asp Phe		125
	130	135
Asn Ser Ser Trp Arg Asp Ala Met Val Gln Asp Ile Thr Gln Lys Phe		140
145	150	155
Ala His His Ile Ile Ala Gly Arg Leu Met Val Ile His Ala Pro Glu		160
	165	170
Glu Tyr Tyr Pro Ile Leu Asp Gly Leu Lys Arg Asn Tyr Asn Asp Pro		175
	180	185
Glu Asp Arg Val Lys Phe Arg Ser Lys Gln Asn Val Asp Tyr Ala Phe		190
	195	200
Leu Leu Asn Phe Cys Ala Asn Thr Ser Asp Tyr Tyr Val Met Leu Glu		205
	210	215
Asp Asp Val Arg Cys Ser Lys Asn Phe Leu Thr Ala Ile Lys Lys Val		220
225	230	235
Ile Ala Ser Leu Glu Gly Thr Tyr Trp Val Thr Leu Glu Phe Ser Lys		240
	245	250
Leu Gly Tyr Ile Gly Lys Leu Tyr His Ser His Asp Leu Pro Arg Leu		255
	260	265
Ala His Phe Leu Leu Met Phe Tyr Gln Glu Met Pro Cys Asp Trp Leu		270
	275	280
Leu Thr His Phe Arg Gly Leu Leu Ala Gln Lys Asn Val Ile Arg Phe		285
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Lys Pro Ser Leu Phe Gln His Met Gly Tyr Tyr Ser Ser Tyr Lys Gly		300
305	310	315
Thr Glu Asn Lys Leu Lys Asp Asp Asp Phe Glu Glu Glu Ser Phe Asp		320
	325	330
Ile Pro Asp Asn Pro Pro Ala Ser Leu Tyr Thr Asn Met Asn Val Phe		335
	340	345
Glu Asn Tyr Glu Ala Ser Lys Ala Tyr Ser Ser Val Asp Glu Tyr Phe		350
	355	360
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	370	375
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Arg Gln Asn Asp Ile Leu His His Gly Ala Leu Asp Val Gly Glu Asn		400
	405	410
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Gly Glu Phe Lys Asn Gly Asn Phe Glu Met Ser Gly Val Asn Gln Lys		430
	435	440
Ile Pro Phe Asp Ile His Cys Met Arg Ile Tyr Val Thr Lys Thr Gln		445
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<211> 4447

<212> DNA

<213> Homo sapiens

<400> 3981

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<212> PRT

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 3984

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<213> Homo sapiens

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<211> 955

<212> PRT

<213> Homo sapiens

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3163

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Val Val Asn Ser Gln Tyr Gly Thr Gln Pro Gln Gln Tyr Pro Pro Ile
          85          90          95
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 <212> DNA
 <213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

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Thr Glu Gly Ala Asn Ile Asn Lys Pro Asp Cys Glu Gly Glu Thr Pro
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Ile His Lys Ala Ala Arg Ser Gly Ser Leu Glu Cys Ile Ser Ala Leu
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<212> PRT

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 3997

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<212> PRT

<213> Homo sapiens

<400> 3998

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Glu Ala Glu Ala Phe Ala Leu Tyr His Lys Ala Leu Asp Leu Gln Lys
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His Asp Arg Phe Glu Glu Ser Ala Lys Ala Tyr His Glu Leu Leu Glu
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Ala Ser Leu Leu Arg Glu Ala Val Ser Ser Gly Asp Glu Lys Glu Gly
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Leu Lys His Pro Gly Leu Ile Leu Lys Tyr Ser Thr Tyr Lys Asn Leu
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Ala Gln Leu Ala Ala Gln Arg Glu Asp Leu Glu Thr Ala Met Glu Phe
      100          105          110
Tyr Leu Glu Ala Val Met Leu Asp Ser Thr Asp Val Asn Leu Trp Tyr
      115          120          125
Lys Ile Gly His Val Ala Leu Arg Leu Ile Arg Ile Pro Leu Ala Arg
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His Ala Phe Glu Glu Gly Leu Arg Cys Asn Pro Asp His Trp Pro Cys
145          150          155          160
Leu Asp Asn Leu Ile Thr Val Leu Tyr Thr Leu Ser Asp Tyr Thr Thr
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Cys Leu Tyr Phe Ile Cys Lys Ala Leu Glu Lys Asp Cys Arg Tyr Ser
      180          185          190
Lys Gly Leu Val Leu Lys Glu Lys Ile Phe Glu Glu Gln Pro Cys Leu
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Arg Lys Asp Ser Leu Arg Met Phe Leu Lys Cys Asp Met Ser Ile His
      210          215          220
Asp Val Ser Val Ser Ala Ala Glu Thr Gln Ala Ile Val Asp Glu Ala
225          230          235          240
Leu Gly Leu Arg Lys Lys Arg Gln Ala Leu Ile Val Arg Glu Lys Glu
      245          250          255
Pro Asp Leu Lys Leu Val Gln Pro Ile Pro Phe Phe Thr Trp Lys Cys
      260          265          270
Leu Gly Glu Ser Leu Leu Ala Met Tyr Asn His Leu Thr Thr Cys Glu
      275          280          285
Pro Pro Arg Pro Ser Leu Gly Lys Arg Ile Asp Leu Ser Asp Tyr Gln
      290          295          300
Asp Pro Ser Gln Pro Leu Glu Ser Ser Met Val Val Thr Pro Val Asn
305          310          315          320
Val Ile Gln Pro Ser Thr Val Ser Thr Asn Pro Ala Val Ala Val Ala
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Glu Pro Val Val Ser Tyr Thr Ser Val Ala Thr Thr Ser Phe Pro Leu
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His Ser Pro Gly Leu Leu Glu Thr Gly Ala Pro Val Gly Asp Ile Ser
      355          360          365
Gly Gly Asp Lys Ser Lys Lys Gly Val Lys Arg Lys Lys Ile Ser Glu
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Glu Ser Gly Glu Thr Ala Lys Arg Arg Ser Ala Arg Val Arg Asn Thr
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Lys Cys Lys Lys Glu Glu Lys Val Asp Phe Gln Glu Leu Leu Met Lys
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Phe Leu Pro Ser Arg Leu Arg Lys Leu Asp Pro Glu Glu Glu Asp Asp

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Pro Ser Ile Gly Pro Gln Arg Leu Ser Phe Asp Ser Ala Thr Phe Met
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Glu Ser Glu Lys Gln Asp Val His Glu Phe Leu Leu Glu Asn Leu Thr
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Asn Gly Gly Ile Leu Glu Leu Met Met Arg Tyr Leu Lys Ala Met Gly
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His Lys Phe Leu Val Arg Trp Pro Pro Gly Leu Ala Glu Val Val Leu
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Ser Val Tyr His Ser Trp Arg Arg His Ser Thr Ser Leu Pro Asn Pro
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Leu Leu Arg Asp Cys Ser Asn Lys His Ile Lys Asp Met Met Leu Met
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Gly Arg Ser Ser Ala Val Ser Pro Arg Asn Cys Pro Ala Gly Met Val
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Ala Glu Arg Arg Asp Ile Val Ile Arg Leu Pro Asn Leu His Asn Asp
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Tyr Lys Ala Val Val His Leu Leu Arg Pro Thr Leu Cys Thr Ser Gly
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Phe Asp Arg Ala Lys His Leu Glu Phe Met Thr Ser Ile Pro Glu Arg
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Pro Ala Gln Leu Leu Leu Leu Gln Asp Ser Leu Leu Arg Leu Lys Asp
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Val Gln Glu Glu Ala Lys Glu Pro His Val Ser Ser Val Leu Pro Trp
835 840 845
Ile Ile Leu His Arg Ile Ile Trp Gln Glu Glu Asp Thr Phe His Ser

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Glu Thr Pro Met Leu Pro	Ser Ser Leu Met Leu	Leu Asn Thr Ala His
885	890	895
Glu Tyr Leu Gly Arg Arg	Ser Trp Cys Cys Asn	Ser Asp Gly Ala Leu
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Leu Arg Phe Tyr Val Arg	Val Leu Gln Lys Glu	Leu Ala Ala Ser Thr
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Ser Glu Asp Thr His Pro	Tyr Lys Glu Glu Leu	Glu Thr Ala Leu Glu
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Gln Cys Phe Tyr Cys Leu	Tyr Ser Phe Pro Ser	Lys Lys Ser Lys Ala
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Arg Tyr Leu Glu Glu His	Ser Ala Gln Gln Val	Asp Leu Ile Trp Glu
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Asp Ala Leu Phe Met Phe	Glu Tyr Phe Lys Pro	Lys Thr Leu Pro Glu
980	985	990
Phe Asp Ser Tyr Lys Thr	Ser Thr Val Ser Ala	Asp Leu Ala Asn Leu
995	1000	1005
Leu Lys Arg Ile Ala Thr	Ile Val Pro Arg Thr	Glu Arg Pro Ala Leu
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Ser Leu Asp Lys Val Ser	Ala Tyr Ile Glu Gly	Thr Ser Thr Glu Val
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Pro Cys Leu Pro Glu Gly	Ala Asp Pro Ser Pro	Pro Val Val Asn Glu
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Leu Tyr Tyr Leu Leu Ala	Asp Tyr His Phe Lys	Asn Lys Glu Gln Ser
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Lys Ala Ile Lys Phe Tyr	Met His Asp Ile Cys	Ile Cys Pro Asn Arg
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Phe Asp Ser Trp Ala Gly	Met Ala Leu Ala Arg	Ala Ser Arg Ile Gln
1090	1095	1100
Asp Lys Leu Asn Ser Asn	Glu Leu Lys Ser Asp	Gly Pro Ile Trp Lys
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His Ala Thr Pro Val Leu	Asn Cys Phe Arg Arg	Ala Leu Glu Ile Asp
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Ser Ser Asn Leu Ser Leu	Trp Ile Glu Tyr Gly	Thr Met Ser Tyr Ala
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Leu His Ser Phe Ala Ser	Arg Gln Leu Lys Gln	Trp Arg Gly Glu Leu
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Pro Pro Glu Leu Val Gln	Gln Met Glu Gly Arg	Arg Asp Ser Met Leu
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Glu Thr Ala Lys His Cys	Phe Thr Ser Ala Ala	Arg Cys Glu Gly Asp
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Ala Gly His Tyr Leu His	Glu Glu Ala Ala Arg	Tyr Pro Lys Lys Ile
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His Tyr His Asn Pro Pro	Glu Leu Ala Met Glu	Ala Leu Glu Val Tyr
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Phe Arg Leu His Ala Ser	Ile Leu Lys Leu Leu	Gly Lys Pro Asp Ser
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Gly Val Gly Ala Glu Val	Leu Val Asn Phe Met	Lys Glu Ala Ala Glu

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Lys Glu Lys Ala Cys Leu Val Asp Glu Asp Ser His Ser Ser Ala Gly					
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Thr Leu Pro Gly Pro Gly Ala Ser Leu Pro Ser Ser Ser Gly Pro Gly					
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Leu Thr Ser Pro Pro Tyr Thr Ala Thr Pro Ile Asp His Asp Tyr Val					
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Lys Cys Lys Lys Pro His Gln Gln Ala Thr Pro Asp Asp Arg Ser Gln					
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Asp Ser Thr Ala Val Ala Leu Ser Asp Ser Ser Ser Thr Gln Asp Phe					
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Glu Lys Arg Leu Pro Ile Leu Ser Ser Gln Ala Gly Ala Thr Gly Lys					
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Gln Gly Leu Phe Cys Glu Arg Asn Lys Thr Asn Phe Phe Asn Gly Ile					
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Trp Arg Ile Pro Val Asp Glu Ile Asp Arg Pro Gly Ser Phe Ala Trp					
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Ser Glu Leu Ala Glu Gly Ser Glu Arg Pro Gly Pro Lys Val Cys Gly					
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Asp Gly Ser Gly Pro Gly Pro Glu Pro Gly Gly Lys Val Gly Leu Leu					

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Gln Pro Thr Pro Leu Thr Pro Ala Gln Pro Ala Pro Ala Pro Ala Pro
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Ala Thr Thr Thr Gly Thr Arg Ala Gly Gly His Pro Glu Glu Pro Leu
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Lys Thr Leu Leu Leu Asp Ala Tyr Arg Val Trp Gln Gln Gly Gln Lys
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Gly Val Ala Tyr Asp Leu Gly Arg Val Glu Arg Ile Met Ser Glu Thr
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Tyr Met Leu Ile Lys Gln Val Asp Glu Glu Ala Ala Leu Glu Gln Ala
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Val Lys Phe Cys Gln Val His Leu Gly Ala Ala Ala Gln Arg Gln Ala
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Ser Gly Asp Thr Pro Thr Thr Pro Lys His Pro Lys Asp Ser Arg Glu
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Ala Asp Ser Val Gln Arg Pro Ser Asp Ala His Thr Lys Pro Arg Pro
1955      1960      1965
Ala Leu Ala Ala Ala Thr Thr Ile Ile Thr Cys Pro Pro Ser Ala Ser
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Ala Ser Thr Leu Asp Gln Ser Lys Asp Pro Gly Pro Pro Arg Pro His
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Arg Pro Glu Ala Thr Pro Ser Met Ala Ser Leu Gly Pro Glu Gly Glu
2005      2010      2015
Glu Leu Ala Arg Val Ala Glu Gly Thr Ser Phe Pro Pro Gln Glu Pro
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Pro His Cys Trp Pro Ala Glu Ala Ala Leu Gly Thr Gly Ala Glu Pro
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Thr Cys Ser Gln Glu Gly Lys Leu Arg Pro Glu Pro Arg Arg Asp Gly
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Glu Ala Gln Glu Ala Ala Ser Glu Thr Gln Pro Leu Ser Ser Pro Pro
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Thr Ala Ala Ser Ser Lys Ala Pro Ser Ser Gly Ser Ala Gln Pro Pro
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Glu Gly His Pro Gly Lys Pro Glu Pro Ser Arg Ala Lys Ser Arg Pro
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Leu Pro Asn Met Pro Lys Leu Val Ile Pro Ser Ala Ala Thr Lys Phe
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Pro Pro Glu Ile Thr Val Thr Pro Pro Thr Pro Thr Leu Leu Ser Pro

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Leu Ser Ala Gln	Ser Ala Ala Asn	Val Arg Lys Glu	Ser Leu Cys Gln
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Pro Ala Leu Glu	Val Leu Glu Thr	Ser Ser Gln Glu	Ser Ser Leu Glu
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<212> DNA

<213> Homo sapiens

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<211> 606

<212> PRT

<213> Homo sapiens

<400> 4000

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 35           40           45
Glu Cys Pro Asp Glu Ser Phe Ile Gln Pro Ile Cys Glu Asn Ala Thr
 50           55           60
Phe Gln Arg Tyr Gln Gly Lys Ala Asp Ala Pro Val Ala Leu Val Val
 65           70           75           80
His Met Ala Pro Ala Ser Val Leu Val Asp Ser Arg Tyr Gln Gln Trp
 85           90           95
Met Glu Arg Phe Gly Pro Asp Thr Gln His Leu Val Leu Asn Glu Asn
 100          105          110
Cys Ala Ser Val His Asn Leu Arg Ser His Lys Ile Gln Thr Gln Leu
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Asn Leu Ile His Pro Asp Ile Phe Pro Leu Leu Thr Ser Phe Arg Cys
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Lys Lys Glu Gly Pro Thr Leu Ser Val Pro Met Val Gln Gly Glu Cys
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Ile Ile Thr Cys Asn Pro Glu Glu Phe Ile Val Glu Ala Leu Gln Leu
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Pro Asn Phe Gln Gln Ser Val Gln Glu Tyr Arg Arg Ser Ala Gln Asp
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Gly Pro Ala Pro Ala Glu Lys Arg Ser Gln Tyr Pro Glu Ile Ile Phe
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Leu Gly Thr Gly Ser Ala Ile Pro Met Lys Ile Arg Asn Val Ser Ala
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Thr Leu Val Asn Ile Ser Pro Asp Thr Ser Leu Leu Leu Asp Cys Gly
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Arg Thr Cys Asp Leu Glu Glu Phe Gln Thr Cys Leu Val Arg His Cys
 370          375          380
Lys His Ala Phe Gly Cys Ala Leu Val His Thr Ser Gly Trp Lys Val
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<210> 4002

<211> 417

<212> PRT

<213> Homo sapiens

<400> 4002

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Leu	Ser	Asp	Ser	Leu	Gly	Val	Ser	Val	Met	Ala	Thr	Asp	Gln	Asp	Ser
		35					40					45			
Tyr	Ser	Thr	Ser	Ser	Thr	Glu	Glu	Glu	Leu	Glu	Gln	Phe	Ser	Ser	Pro
	50					55					60				
Ser	Val	Lys	Lys	Lys	Pro	Ser	Met	Ile	Leu	Gly	Lys	Ala	Arg	His	Arg
65					70					75					80
Leu	Ser	Phe	Ala	Ser	Phe	Ser	Ser	Met	Phe	His	Ala	Phe	Leu	Ser	Asn
				85					90					95	
Asn	Arg	Lys	Leu	Tyr	Lys	Lys	Val	Val	Glu	Leu	Ala	Gln	Asp	Lys	Gly
			100					105					110		
Ser	Tyr	Phe	Gly	Ser	Leu	Val	Gln	Asp	Tyr	Lys	Val	Tyr	Ser	Leu	Glu
		115					120					125			
Met	Met	Ala	Arg	Gln	Thr	Ser	Ser	Thr	Glu	Met	Leu	Gln	Glu	Ile	Arg
		130				135					140				
Thr	Met	Met	Thr	Gln	Leu	Lys	Ser	Tyr	Leu	Leu	Gln	Ser	Thr	Glu	Leu
145					150					155					160
Lys	Ala	Leu	Val	Asp	Pro	Ala	Leu	His	Ser	Glu	Glu	Glu	Leu	Glu	Ala
				165					170					175	
Ile	Val	Glu	Ser	Ala	Leu	Tyr	Lys	Cys	Val	Leu	Lys	Pro	Leu	Lys	Glu
			180					185					190		
Ala	Ile	Asn	Ser	Cys	Leu	His	Gln	Ile	His	Ser	Lys	Asp	Gly	Ser	Leu
		195					200					205			
Gln	Gln	Leu	Lys	Glu	Asn	Gln	Leu	Val	Ile	Leu	Ala	Thr	Thr	Thr	Thr
		210				215					220				
Asp	Leu	Gly	Val	Thr	Thr	Ser	Val	Pro	Glu	Val	Pro	Met	Met	Glu	Lys

225		230		235		240									
Ile	Leu	Gln	Lys	Phe	Thr	Ser	Met	His	Lys	Ala	Tyr	Ser	Pro	Glu	Lys
				245					250					255	
Lys	Ile	Ser	Ile	Leu	Leu	Lys	Thr	Cys	Lys	Leu	Ile	Tyr	Asp	Ser	Met
			260					265					270		
Ala	Leu	Gly	Asn	Pro	Gly	Lys	Pro	Tyr	Gly	Ala	Asp	Asp	Phe	Leu	Pro
		275					280					285			
Val	Leu	Met	Tyr	Val	Leu	Ala	Arg	Ser	Asn	Leu	Thr	Glu	Met	Leu	Leu
	290					295					300				
Asn	Val	Glu	Tyr	Met	Met	Glu	Leu	Met	Asp	Pro	Ala	Leu	Gln	Leu	Gly
305					310					315				320	
Glu	Gly	Ser	Tyr	Tyr	Leu	Thr	Thr	Thr	Tyr	Gly	Ala	Leu	Glu	His	Ile
			325						330					335	
Lys	Ser	Tyr	Asp	Lys	Ile	Thr	Val	Thr	Arg	Gln	Leu	Ser	Val	Glu	Val
			340					345					350		
Gln	Asp	Ser	Ile	His	Arg	Trp	Glu	Arg	Arg	Arg	Thr	Leu	Asn	Lys	Ala
	355						360					365			
Arg	Ala	Ser	Arg	Ser	Ser	Val	Gln	Asp	Phe	Ile	Cys	Val	Ser	Tyr	Leu
	370					375					380				
Glu	Pro	Glu	Gln	Gln	Ala	Arg	Thr	Leu	Ala	Ser	Arg	Ala	Asp	Thr	Gln
385					390					395					400
Ala	Gln	Ala	Leu	Cys	Ala	Gln	Cys	Ala	Glu	Lys	Phe	Ala	Val	Glu	Arg
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Pro

<210> 4003

<211> 581

<212> DNA

<213> Homo sapiens

<400> 4003

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120

cgagcaaaag atgtgataat accagcaaaag ccacctgtca gctttttctc cttgaggtct

180

ccagtccttg acctcttcca ggggcagctg gattatgcag agtacgttcg acgggattca

240

gaggtggtac tgctcttctt ctatgccctt tgggtgtggac agtccatcgc tgccagggca

300

gaaattgagc aagcagcaag tcggctttca gatcaggtgt tgtttgtggc aattaactgt

360

tggtggaacc aggggaaatg cagaaaacag aaacacttct tttattttcc tgtaatatat

420

ctgtatcatc ggagtttttg accaatcgaa tacaaaggcc cccatgagtg ctgtttacat

480

tgagaagttt gtccgcccgg tgatgaaacc acttctctac atcccatctc aatcagaatt

540

actagatttt ctctcaaact acgagcctgg agtactcgcy a

581

<210> 4004

<211> 160
 <212> PRT
 <213> Homo sapiens

<400> 4004

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      20           25           30
Leu Ala Leu Lys Phe Thr Cys Ser Arg Ala Lys Asp Val Ile Ile Pro
      35           40           45
Ala Lys Pro Pro Val Ser Phe Phe Ser Leu Arg Ser Pro Val Leu Asp
      50           55           60
Leu Phe Gln Gly Gln Leu Asp Tyr Ala Glu Tyr Val Arg Arg Asp Ser
65           70           75           80
Glu Val Val Leu Leu Phe Phe Tyr Ala Pro Trp Cys Gly Gln Ser Ile
      85           90           95
Ala Ala Arg Ala Glu Ile Glu Gln Ala Ala Ser Arg Leu Ser Asp Gln
      100          105          110
Val Leu Phe Val Ala Ile Asn Cys Trp Trp Asn Gln Gly Lys Cys Arg
      115          120          125
Lys Gln Lys His Phe Phe Tyr Phe Pro Val Ile Tyr Leu Tyr His Arg
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Ser Phe Gly Pro Ile Glu Tyr Lys Gly Pro His Glu Cys Cys Leu His
145          150          155          160

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 <212> DNA
 <213> Homo sapiens

<400> 4005

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120
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240
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300
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360
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420
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480
gccatcaggc acatcagtgc tgaggtagtg cccatggggc ccccgcccc tccaaagccg
540
aaacagacca gagatagtac tttcatggag aagttacatg cggtagatga ggagctggct
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660

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acgcgt
666

<210> 4006
<211> 222
<212> PRT
<213> Homo sapiens

<400> 4006
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20 25 30
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35 40 45
Pro Lys Met Thr Arg Ser Lys Leu Lys Glu Val Val Glu Lys Gly Met
50 55 60
Val Ile Pro Thr Trp Asn Ile Ser Pro Ile Lys Lys Ala Asn Glu Ile
65 70 75 80
Lys Pro Pro Gln Phe Val Asp Ile His Leu Glu Glu Asp Asp Ser Ser
85 90 95
Asp Glu Glu Tyr Gln Pro Asp Asp Glu Glu Glu Asp Glu Thr Ala Glu
100 105 110
Glu Ser Leu Leu Glu Ser Asp Val Glu Ser Thr Ala Ser Ser Pro Arg
115 120 125
Gly Ala Lys Lys Ser Arg Leu Arg Gln Ser Ser Glu Met Thr Glu Thr
130 135 140
Asp Glu Glu Ser Gly Ile Leu Ser Glu Ala Glu Lys Val Thr Thr Pro
145 150 155 160
Ala Ile Arg His Ile Ser Ala Glu Val Val Pro Met Gly Pro Pro Pro
165 170 175
Pro Pro Lys Pro Lys Gln Thr Arg Asp Ser Thr Phe Met Glu Lys Leu
180 185 190
His Ala Val Asp Glu Glu Leu Ala Ser Ser Pro Val Cys Met Asp Ser
195 200 205
Phe Gln Pro Met Asp Asp Ser Leu Ile Ala Phe Arg Thr Arg
210 215 220

<210> 4007
<211> 2313
<212> DNA
<213> Homo sapiens

<400> 4007
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aattgggacc ggaaaacgtt gtcgctcatc ctatgacgcg aaagtaaccg agactatcag
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240
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420
gaacagatag aaaaatctag agatggatat gttgatatat cactacttgt gtcttttaac
480
aaaatgaaaa aattgactac tgatgggaag ttaattgcca gagcattgag aagttcagct
540
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720
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780
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840
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900
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960
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1320
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1920

accaaagctg aaaagattag actggcaaag actcaacaag cgagtaaaca tataagattt
 1980
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 2040
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 2100
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 2160
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 2313

<210> 4008
 <211> 290
 <212> PRT
 <213> Homo sapiens

<400> 4008
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 20 25 30
 Ser Glu Ala Ser Lys Glu Asn Arg Asp Ile Glu Ile Ser Thr Glu Glu
 35 40 45
 Glu Lys Asp Thr Gly Asp Leu Lys Asp Ser Ser Leu Leu Lys Thr Lys
 50 55 60
 Arg Lys His Lys Lys Lys His Lys Glu Arg His Lys Met Gly Glu Glu
 65 70 75 80
 Val Ile Pro Leu Arg Val Leu Ser Lys Ser Glu Trp Met Asp Leu Lys
 85 90 95
 Lys Glu Tyr Leu Ala Leu Gln Lys Ala Ser Met Ala Ser Leu Lys Lys
 100 105 110
 Thr Ile Ser Gln Ile Lys Ser Glu Ser Glu Met Glu Thr Asp Ser Gly
 115 120 125
 Val Pro Gln Asn Thr Gly Met Lys Asn Glu Lys Thr Ala Asn Arg Glu
 130 135 140
 Glu Cys Arg Thr Gln Glu Lys Val Asn Ala Thr Gly Pro Gln Phe Val
 145 150 155 160
 Ser Gly Val Ile Val Lys Ile Ile Ser Thr Glu Pro Leu Pro Gly Arg
 165 170 175
 Lys Gln Val Arg Asp Thr Leu Ala Ala Ile Ser Glu Val Leu Tyr Val
 180 185 190
 Asp Leu Leu Glu Gly Asp Thr Glu Cys His Ala Arg Phe Lys Thr Pro
 195 200 205
 Glu Asp Ala Gln Ala Val Ile Asn Ala Tyr Thr Glu Ile Asn Lys Lys
 210 215 220
 His Cys Trp Lys Leu Glu Ile Leu Ser Gly Asp His Glu Gln Arg Tyr
 225 230 235 240
 Trp Gln Lys Ile Leu Val Asp Arg Gln Ala Lys Leu Asn Gln Pro Arg
 245 250 255
 Glu Lys Lys Arg Gly Thr Glu Lys Leu Ile Thr Lys Ala Glu Lys Ile

260 265 270
 Arg Leu Ala Lys Thr Gln Gln Ala Ser Lys His Ile Arg Phe Ser Glu
 275 280 285
 Tyr Asp
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<210> 4009
 <211> 675
 <212> DNA
 <213> Homo sapiens

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 120
 tcagaagaac cagtagttta taatccaaca acagctgcct tcactctgtga ctcacttggtg
 180
 aatgaaaaaa ccataggcag tcttcctaag gagttttact gttctgaaaa cacttctgtc
 240
 cctaacgaat ctaacaagat tcttggttaat aaagatgtac ctcagaaacc aggaggtgaa
 300
 accacacctt cagtaactga cttactaaat tatttttttg ctccagagat tcttactggg
 360
 gataaccaat attattgtga aaactgtgcc tctctgcaaa atgctgagaa aactatgcaa
 420
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 480
 tatcatgtga gaaggaaaat tttagacaat gtatcactgc cactgggttt ggagttgcca
 540
 gttaaaagaa ttacttcttt ctcttcattg tcagaaagtt ggtctgtaga tgttgacttc
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<210> 4010
 <211> 225
 <212> PRT
 <213> Homo sapiens

<400> 4010
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 20 25 30
 Met Gln Ala Ser Val Pro Gly Pro Ser Glu Glu Pro Val Val Tyr Asn
 35 40 45
 Pro Thr Thr Ala Ala Phe Ile Cys Asp Ser Leu Val Asn Glu Lys Thr
 50 55 60
 Ile Gly Ser Pro Pro Asn Glu Phe Tyr Cys Ser Glu Asn Thr Ser Val
 65 70 75 80
 Pro Asn Glu Ser Asn Lys Ile Leu Val Asn Lys Asp Val Pro Gln Lys

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<210> 4011
<211> 1371
<212> DNA
<213> Homo sapiens
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120
gagctgtggc tgccgcatgg gacagtggcc actcctgtgt tcatgccagt gggcacgcag
180
gccaccatga agggcatcac gaccgaacag ctggacgctc tggggtgccg catctgcctg
240
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300
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420
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480
cagatccaga atgcgctggg ctccggacatc atcatgcagc tggacgacgt ggtagcagt
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720
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780
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840
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 1020
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<210> 4012

<211> 419

<212> PRT

<213> Homo sapiens

<400> 4012

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			20					25						30	
Ser	Arg	Ser	Arg	Ala	Arg	Ala	Gly	Glu	Leu	Trp	Leu	Pro	His	Gly	Thr
			35				40						45		
Val	Ala	Thr	Pro	Val	Phe	Met	Pro	Val	Gly	Thr	Gln	Ala	Thr	Met	Lys
			50			55					60				
Gly	Ile	Thr	Thr	Glu	Gln	Leu	Asp	Ala	Leu	Gly	Cys	Arg	Ile	Cys	Leu
65					70				75					80	
Gly	Asn	Thr	Tyr	His	Leu	Gly	Leu	Arg	Pro	Gly	Pro	Glu	Leu	Ile	Gln
				85				90						95	
Lys	Ala	Asn	Gly	Leu	His	Gly	Phe	Met	Asn	Trp	Pro	His	Asn	Leu	Leu
			100					105					110		
Thr	Leu	Cys	Gly	Gly	Val	Ser	Leu	Asp	Ser	Gly	Gly	Phe	Gln	Met	Val
			115				120					125			
Ser	Leu	Val	Ser	Leu	Ser	Glu	Val	Thr	Glu	Glu	Gly	Val	Arg	Phe	Arg
			130			135					140				
Ser	Pro	Tyr	Asp	Gly	Asn	Glu	Thr	Leu	Leu	Ser	Pro	Glu	Lys	Ser	Val
145					150				155					160	
Gln	Ile	Gln	Asn	Ala	Leu	Gly	Ser	Asp	Ile	Ile	Met	Gln	Leu	Asp	Asp
				165				170						175	
Val	Val	Ser	Ser	Thr	Val	Thr	Gly	Pro	Arg	Val	Glu	Glu	Ala	Met	Tyr
			180				185						190		
Arg	Ser	Ile	Arg	Trp	Leu	Asp	Arg	Cys	Ile	Ala	Ala	His	Gln	Arg	Pro
			195			200						205			
Asp	Lys	Gln	Asn	Leu	Phe	Ala	Ile	Ile	Gln	Gly	Gly	Leu	Asp	Ala	Asp
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<211> 1419
<212> DNA
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180
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240
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300
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360
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420
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480
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540
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gacaagcact ttgggtctgg cgacctgatg gaccccgaa tactggggct gacctacatc
660

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 780
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<210> 4014

<211> 473

<212> PRT

<213> Homo sapiens

<400> 4014

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Thr	Pro	Ala	Leu	Gln	Pro	Leu	Ser	Arg	Ala	Ser	Pro	Ile	Pro	Gly	Thr
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			85					90					95		
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		115					120					125			
Arg	Glu	Arg	Glu	Asp	Thr	Met	Glu	Ala	Ser	Arg	His	Pro	Glu	Thr	Lys
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			180						185					190			
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		195					200					205					
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			245					250						255			
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		260					265					270					
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			325					330						335			
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Pro	Pro	Pro	Glu	Glu	Pro	Glu	Val	Thr	Glu	Cys	Pro	Gly	Met	Tyr	Ser		
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			405					410						415			
Lys	Leu	Met	Leu	Pro	Asp	Ser	Pro	Leu	Val	Glu	Glu	Gly	Arg	Arg	Lys		
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<211> 823

<212> DNA

<213> Homo sapiens

<400> 4015

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180
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240

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 720
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<211> 95

<212> PRT

<213> Homo sapiens

<400> 4016

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			20					25					30		
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		35					40					45			
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	50					55					60				
Thr	Ser	Glu	Gln	Leu	Thr	Glu	Gln	Glu	Arg	Ala	Lys	Asp	Ala	Glu	Lys
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<210> 4017

<211> 1521

<212> DNA

<213> Homo sapiens

<400> 4017

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<211> 480

<212> PRT

<213> Homo sapiens

<400> 4018

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		35					40					45					
Val	Ala	Trp	Asp	Tyr	Gly	Arg	Leu	Ala	Leu	Val	Thr	Asp	Ala	Asp	Arg		
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Leu	Arg	Arg	Gln	Glu	Arg	Asp	Arg	Val	Glu	Gln	Glu	Tyr	Val	Ala	Ser		
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Ala	Met	His	Gly	Asp	Ser	His	Asp	Arg	Tyr	Glu	Arg	Leu	Thr	Phe	Val		
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Leu	Thr	Ala	Ile	Phe	Arg	Ile	Lys	Asp	Asp	Glu	Ile	Arg	Asp	Lys	Cys		
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			165					170						175			
Thr	Thr	Ile	Ala	Asn	Leu	Lys	Ser	Gly	Asn	Asn	Leu	Leu	Trp	Leu	His		
			180					185					190				
Thr	Ser	Phe	Ala	Phe	Leu	Tyr	Leu	Leu	Leu	Thr	Val	Tyr	Ser	Met	Arg		
		195					200					205					
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Thr	Lys	Leu	Glu	Gln	Lys	Leu	Lys	Glu	Asp	Tyr	Lys	Arg	Glu	Lys	Gly		
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			340					345					350				
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		355					360					365					
Gln	Gly	Cys	Thr	Cys	Arg	Gly	Glu	Pro	Arg	Pro	Ser	Ser	Cys	Ser	Glu		
	370					375					380						
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385					390					395					400		
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			405					410					415				
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			420					425					430				
Thr	Thr	Pro	Ala	Ile	Ile	Ile	Thr	Thr	Met	Asp	Lys	Phe	Asn	Val	Thr		
		435					440					445					
Lys	Pro	Val	Glu	Tyr	Leu	Asn	Asn	Pro	Ile	Ile	Thr	Gln	Phe	Phe	Pro		

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<211> 2408

<212> DNA

<213> Homo sapiens

<400> 4019

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1320

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<211> 296

<212> PRT

<213> Homo sapiens

<400> 4020

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Leu	Val	Cys	Gly	Leu	Leu	Leu	Val	Ile	Ala	Leu	Gly	Cys	Thr	Cys	Lys
		35					40					45			
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		180						185				190			
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		195				200					205				
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	210					215					220				
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			260					265				270			
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<210> 4021

<211> 4209

<212> DNA

<213> Homo sapiens

<400> 4021

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Ser Gly Lys Gly Ile Leu Ser Gly His Ala Asp Gly Thr Ile Val Arg			
100	105	110	
Tyr Phe Phe Asp Asp Glu Gly Ser Gly Glu Ser Gln Gly Lys Leu Val			
115	120	125	
Asn His Pro Cys Pro Pro Tyr Ala Leu Ala Trp Ala Thr Asn Ser Ile			
130	135	140	
Val Ala Ala Gly Cys Asp Arg Lys Ile Val Ala Tyr Gly Lys Glu Gly			
145	150	155	160
His Met Leu Gln Thr Phe Asp Tyr Ser Arg Asp Pro Gln Glu Arg Glu			
165	170	175	
Phe Thr Thr Ala Val Ser Ser Pro Gly Gly Gln Ser Val Val Leu Gly			
180	185	190	
Ser Tyr Asp Arg Leu Arg Val Phe Asn Trp Ile Pro Arg Arg Ser Ile			
195	200	205	
Trp Glu Glu Ala Lys Pro Lys Glu Ile Thr Asn Leu Tyr Thr Ile Thr			
210	215	220	
Ala Leu Ala Trp Lys Arg Asp Gly Ser Arg Leu Cys Val Gly Thr Leu			
225	230	235	240
Cys Gly Gly Val Glu Gln Phe Asp Cys Cys Leu Arg Arg Ser Ile Tyr			
245	250	255	
Lys Asn Lys Phe Glu Leu Thr Tyr Val Gly Pro Ser Gln Val Ile Val			
260	265	270	
Lys Asn Leu Ser Ser Gly Thr Arg Val Val Leu Lys Ser His Tyr Gly			
275	280	285	
Tyr Glu Val Glu Glu Val Lys Ile Leu Gly Lys Glu Arg Tyr Leu Val			
290	295	300	
Ala His Thr Ser Glu Thr Leu Leu Leu Gly Asp Leu Asn Thr Asn Arg			
305	310	315	320
Leu Ser Glu Ile Ala Trp Gln Gly Ser Gly Gly Asn Glu Lys Tyr Phe			
325	330	335	
Phe Glu Asn Glu Asn Val Cys Met Ile Phe Asn Ala Gly Glu Leu Thr			
340	345	350	
Leu Val Glu Tyr Gly Asn Asn Asp Thr Leu Gly Ser Val Arg Thr Glu			
355	360	365	
Phe Met Asn Pro His Leu Ile Ser Val Arg Ile Asn Glu Arg Cys Gln			
370	375	380	
Arg Gly Thr Glu Asp Asn Lys Lys Leu Ala Tyr Leu Ile Asp Ile Lys			
385	390	395	400
Thr Ile Ala Ile Val Asp Leu Ile Gly Gly Tyr Asn Ile Gly Thr Val			
405	410	415	
Ser His Glu Ser Arg Val Asp Trp Leu Glu Leu Asn Glu Thr Gly His			
420	425	430	
Lys Leu Leu Phe Arg Asp Arg Lys Leu Arg Leu His Leu Tyr Asp Ile			

435	440	445
Glu Ser Cys Ser Lys Thr Met	Ile Leu Asn Phe Cys Ser Tyr Met Gln	
450	455	460
Trp Val Pro Gly Ser Asp Val	Leu Val Ala Gln Asn Arg Asn Ser Leu	
465	470	475
Cys Val Trp Tyr Asn Ile Glu	Ala Pro Glu Arg Val Thr Met Phe Thr	480
485	490	495
Ile Arg Gly Asp Val Ile Gly	Leu Glu Arg Gly Gly Gly Lys Thr Glu	
500	505	510
Val Met Val Met Glu Gly Val	Thr Thr Val Ala Tyr Thr Leu Asp Glu	
515	520	525
Gly Leu Ile Glu Phe Gly Thr	Ala Ile Asp Asp Gly Asn Tyr Ile Arg	
530	535	540
Ala Thr Ala Phe Leu Glu Thr	Leu Glu Met Thr Pro Glu Thr Glu Ala	
545	550	555
Met Trp Lys Thr Leu Ser Lys	Leu Ala Leu Glu Ala Arg Gln Leu His	560
565	570	575
Ile Ala Glu Arg Cys Phe Ser	Ala Leu Gly Gln Val Ala Lys Ala Arg	
580	585	590
Phe Leu His Glu Thr Asn Glu	Ile Ala Asp Gln Val Ser Arg Glu Tyr	
595	600	605
Gly Gly Glu Gly Thr Asp Phe	Tyr Gln Val Arg Ala Arg Leu Ala Met	
610	615	620
Leu Glu Lys Asn Tyr Lys Leu	Ala Glu Met Ile Phe Leu Glu Gln Asn	
625	630	635
Ala Val Glu Glu Ala Met Gly	Met Tyr Gln Glu Leu His Arg Trp Asp	
645	650	655
Glu Cys Ile Ala Val Ala Glu	Ala Lys Gly His Pro Ala Leu Glu Lys	
660	665	670
Leu Arg Arg Ser Tyr Tyr Gln	Trp Leu Met Asp Thr Gln Gln Glu Glu	
675	680	685
Arg Ala Gly Glu Leu Gln Glu	Ser Gln Gly Asp Gly Leu Ala Ala Ile	
690	695	700
Ser Leu Tyr Leu Lys Ala Gly	Leu Pro Ala Lys Ala Ala Arg Leu Val	
705	710	715
Leu Thr Arg Glu Glu Leu Leu	Ala Asn Thr Glu Leu Val Glu His Ile	
725	730	735
Thr Ala Ala Leu Ile Lys Gly	Glu Leu Tyr Glu Arg Ala Gly Asp Leu	
740	745	750
Phe Glu Lys Ile His Asn Pro	Gln Lys Ala Leu Glu Cys Tyr Arg Lys	
755	760	765
Gly Asn Ala Phe Met Lys Ala	Val Glu Leu Ala Arg Leu Ala Phe Pro	
770	775	780
Val Glu Val Val Lys Leu Glu	Glu Ala Trp Gly Asp His Leu Val Gln	
785	790	795
Gln Lys Gln Leu Asp Ala Ala	Ile Asn His Tyr Ile Glu Ala Arg Cys	
805	810	815
Ser Ile Lys Ala Ile Glu Ala	Ala Leu Gly Ala Arg Gln Trp Lys Lys	
820	825	830
Ala Ile Tyr Ile Leu Asp Leu	Gln Asp Arg Asn Thr Ala Ser Lys Tyr	
835	840	845
Tyr Pro Leu Val Ala Gln His	Tyr Ala Ser Leu Gln Glu Tyr Glu Ile	
850	855	860
Ala Glu Glu Leu Tyr Thr Lys	Gly Asp Arg Thr Lys Asp Ala Ile Asp	

865		870		875		880
Met Tyr Thr Gln Ala Gly Arg Trp Glu Gln Ala His Lys Leu Ala Met						
	885		890		895	
Lys Cys Met Arg Pro Glu Asp Val Ser Val Leu Tyr Ile Thr Gln Ala						
	900		905		910	
Gln Glu Met Glu Lys Gln Gly Lys Tyr Arg Glu Ala Glu Arg Leu Tyr						
	915		920		925	
Val Thr Val Gln Glu Pro Asp Leu Ala Ile Thr Met Tyr Lys Lys His						
	930		935		940	
Lys Leu Tyr Asp Asp Met Ile Arg Leu Val Gly Lys His His Pro Asp						
945		950		955		960
Leu Leu Ser Asp Thr His Leu His Leu Gly Lys Glu Leu Glu Ala Glu						
	965		970		975	
Gly Arg Leu Gln Glu Ala Glu Tyr His Tyr Leu Glu Ala Gln Glu Trp						
	980		985		990	
Lys Ala Thr Val Asn Met Tyr Arg Ala Ser Gly Leu Trp Glu Glu Ala						
	995		1000		1005	
Tyr Arg Val Ala Arg Thr Gln Gly Gly Ala Asn Ala His Lys His Val						
	1010		1015		1020	
Ala Tyr Leu Trp Ala Lys Ser Leu Gly Gly Glu Ala Ala Val Arg Leu						
1025		1030		1035		1040
Leu Asn Lys Leu Gly Leu Leu Glu Ala Ala Val Asp His Ala Ala Asp						
	1045		1050		1055	
Asn Cys Ser Phe Glu Phe Ala Phe Glu Leu Ser Arg Leu Ala Leu Lys						
	1060		1065		1070	
His Lys Thr Pro Glu Val His Leu Lys Tyr Ala Met Phe Leu Glu Asp						
	1075		1080		1085	
Glu Gly Lys Phe Glu Glu Ala Glu Ala Glu Phe Ile Arg Ala Gly Lys						
	1090		1095		1100	
Pro Lys Glu Ala Val Leu Met Phe Val His Asn Gln Asp Trp Glu Ala						
1105		1110		1115		1120
Ala Gln Arg Val Ala Glu Ala His Asp Pro Asp Ser Val Ala Glu Val						
	1125		1130		1135	
Leu Val Gly Gln Ala Arg Gly Ala Leu Glu Glu Lys Asp Phe Gln Lys						
	1140		1145		1150	
Ala Glu Gly Leu Leu Leu Arg Ala Gln Arg Pro Gly Leu Ala Leu Asn						
	1155		1160		1165	
Tyr Tyr Lys Glu Ala Gly Leu Trp Ser Asp Ala Leu Arg Ile Cys Lys						
	1170		1175		1180	
Asp Tyr Val Pro Ser Gln Leu Glu Ala Leu Gln Glu Glu Tyr Glu Arg						
1185		1190		1195		1200
Glu Ala Thr Lys Lys Gly Ala Arg Gly Val Glu Gly Phe Val Glu Gln						
	1205		1210		1215	
Ala Arg His Trp Glu Gln Ala Gly Glu Tyr Ser Arg Ala Val Asp Cys						
	1220		1225		1230	
Tyr Leu Lys Val Arg Asp Ser Gly Asn Ser Gly Leu Ala Glu Lys Cys						
	1235		1240		1245	
Trp Met Lys Ala Ala Glu Leu Ser Ile Lys Phe Leu Pro Pro Gln Arg						
	1250		1255		1260	
Asn Met Glu Val Val Leu Ala Val Gly Pro Gln Leu Ile Gly Ile Gly						
1265		1270		1275		1280
Lys His Ser Ala Ala Ala Glu Leu Tyr Leu Asn Leu Asp Leu Val Lys						
	1285		1290		1295	
Glu Ala Ile Asp Ala Phe Ile Glu Gly Glu Glu Trp Asn Lys Ala Lys						

	1300		1305		1310
Arg	Val	Ala	Lys	Glu	Leu
	1315		1320		1325
His	Tyr	Lys	Glu	Phe	Leu
	1330		1335		1340
Gly	Val	Asp	Val	Ile	Ala
1345			1350		1355
Trp	Asp	Lys	Cys	Ile	Glu
	1365		1370		1375
His	Lys	Tyr	Val	Ala	Leu
	1380		1385		1390
Ser	Ala	Gln	Ala	Leu	Ala
	1395		1400		1405
Pro	Gln	Asn	Phe	Asn	Ile
	1410		1415		1420
Ser	Pro	Gly	Thr	Asn	Cys
1425			1430		1435
Arg	Asp	Val	Leu	Phe	Asn
	1445		1450		1455
Lys	Thr	Trp	Lys	Ser	Ser
	1460		1465		1470
Lys	Thr	Met	Leu	Leu	Ile
	1475		1480		1485
Gln	Ser	Val	Lys	Gln	Leu
	1490		1495		1500
Leu	Leu	Arg	His	Thr	Gln
1505			1510		1515
Ala	Gly	Ile	Ala	Ala	Lys
	1525		1530		1535
Phe	Leu	Asn	Arg	Phe	Leu
	1540		1545		1550
Leu	Asp	Gly	Leu	Asp	His
	1555		1560		1565
Glu	Val	Pro	Leu	Pro	Ala
	1570		1575		1580
Glu	Val	Arg	Asp	Trp	Val
1585			1590		1595
Gln	Val	Leu	Pro	Arg	Asp
	1605		1610		1615
Ala	Ala	Ser	Thr	Gly	Val
	1620		1625		1630
Pro	Ile	Leu	Arg	Asn	Lys
	1635		1640		1645
Asn	Lys	Asp	Asn	Trp	Asn
	1650		1655		1660
Ser	Pro	Val	Cys	Gln	Asp
1665			1670		1675
Gly	Leu	Pro	Ser	Thr	Ser
	1685		1690		

<210> 4025

<211> 908

<212> DNA

<213> Homo sapiens

<400> 4025

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 120
 aaccagtgtt ttcacgtttt ccgcaccagt tgtaacctta aaagccacaa gaggattcac
 180
 acgggggaga atcaccatga atgtaatcag tgtggaaaag ctttcagcac aaggctcctc
 240
 ctcactgggc acaattgcat tcatacaggg gagaaacctt atgaatgtaa ggaatgtggg
 300
 aaaaccttta tgtataattc atcccttatt caacatctga gaactcatac tggagagaaa
 360
 ccctatgaat gtaaggagtg tgggaaagcc tttaggcaac attcacacct tgtcacacac
 420
 cagaaaatcc atactggaga gaagccctat cagtgcactg aatgtgggaa agccttcagg
 480
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 540
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 600
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 660
 gagnagcaga aaattcacca agaagagaaa gcttattggg gtaatcagtg tggtagggct
 720
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 780
 gaatgtaaag aatgtggana aactttcaat cagagctcag accttctgag acatcataga
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 908

<210> 4026

<211> 302

<212> PRT

<213> Homo sapiens

<400> 4026

Leu	Arg	Thr	His	Thr	Gly	Xaa	Lys	Pro	Tyr	Glu	Cys	Asn	His	Cys	Gly
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Lys	Ala	Phe	Ser	Asp	Pro	Ser	Ser	Leu	Arg	Leu	His	Leu	Arg	Ile	His
			20					25					30		
Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys	Asn	Gln	Cys	Phe	His	Val	Phe	Arg
		35					40					45			
Thr	Ser	Cys	Asn	Leu	Lys	Ser	His	Lys	Arg	Ile	His	Thr	Gly	Glu	Asn
	50				55						60				
His	His	Glu	Cys	Asn	Gln	Cys	Gly	Lys	Ala	Phe	Ser	Thr	Arg	Ser	Ser
65					70				75					80	
Leu	Thr	Gly	His	Asn	Cys	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Glu	Cys
			85					90						95	
Lys	Glu	Cys	Gly	Lys	Thr	Phe	Met	Tyr	Asn	Ser	Ser	Leu	Ile	Gln	His

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<210> 4027
<211> 941
<212> DNA
<213> Homo sapiens
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120
ggattgattc agatgggatg tgttttccag agcacagaag tgaaacacgt gaccaaggta
180
gaatggatat tttcaggacg gcgcgcaaag gaggagattg tatttcgtta ctaccacaaa
240
ctcaggatgt ctgcggagta ctcccagagc tggggccact tccagaatcg tgtgaacctg
300
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360
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420
ctgcatgtca gcccggaaga gcctcgaaca ctggtgacct cggcagccct gaggcctctg
480
gtcttgggtg gtaatcagtt ggtgatcatt gtgggaattg tctgtgccac aatcctgctg
540
ctcctgttc tgatattgat cgtgaagaag acctgtggaa ataagagttc agtgaattct
600
acagtcttgg tgaagaacac gaagaagact aatccagaga tgaaagaaaa accctgccat
660
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 780
 caggccagtg cttggcacag agcagggact caggaagcct ttgtcactaa agtaagagcc
 840
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<210> 4028

<211> 236

<212> PRT

<213> Homo sapiens

<400> 4028

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Gln	Val	Phe	Lys	Lys	Ala	Val	Val	Leu	His	Val	Leu	Pro	Glu	Glu	Pro
			20					25					30		
Lys	Glu	Leu	Met	Val	His	Val	Gly	Gly	Leu	Ile	Gln	Met	Gly	Cys	Val
		35					40					45			
Phe	Gln	Ser	Thr	Glu	Val	Lys	His	Val	Thr	Lys	Val	Glu	Trp	Ile	Phe
	50					55					60				
Ser	Gly	Arg	Arg	Ala	Lys	Glu	Glu	Ile	Val	Phe	Arg	Tyr	Tyr	His	Lys
65					70					75					80
Leu	Arg	Met	Ser	Ala	Glu	Tyr	Ser	Gln	Ser	Trp	Gly	His	Phe	Gln	Asn
				85				90						95	
Arg	Val	Asn	Leu	Val	Gly	Asp	Ile	Phe	Arg	Asn	Asp	Gly	Ser	Ile	Met
			100					105					110		
Leu	Gln	Gly	Val	Arg	Glu	Ser	Asp	Gly	Gly	Asn	Tyr	Thr	Cys	Ser	Ile
		115					120					125			
His	Leu	Gly	Asn	Leu	Val	Phe	Lys	Lys	Thr	Ile	Val	Leu	His	Val	Ser
	130					135					140				
Pro	Glu	Glu	Pro	Arg	Thr	Leu	Val	Thr	Pro	Ala	Ala	Leu	Arg	Pro	Leu
145					150					155					160
Val	Leu	Gly	Gly	Asn	Gln	Leu	Val	Ile	Ile	Val	Gly	Ile	Val	Cys	Ala
			165					170						175	
Thr	Ile	Leu	Leu	Leu	Pro	Val	Leu	Ile	Leu	Ile	Val	Lys	Lys	Thr	Cys
		180						185					190		
Gly	Asn	Lys	Ser	Ser	Val	Asn	Ser	Thr	Val	Leu	Val	Lys	Asn	Thr	Lys
	195					200						205			
Lys	Thr	Asn	Pro	Glu	Met	Lys	Glu	Lys	Pro	Cys	His	Phe	Glu	Arg	Cys
	210					215					220				
Glu	Gly	Glu	Val	Asn	Thr	Arg	Phe	Ser	Leu	Lys	His				
225					230					235					

<210> 4029

<211> 909

<212> DNA

<213> Homo sapiens

<400> 4029

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 120
 ctacatgctg ctgctgggtgc tgccgtgcgt ggcgctcagc gaggtcagca tgcagggcga
 180
 gcacatagcg ccgcagaaga tgatgctgta cccggtgctc agtctcgcca ccgtcaatgt
 240
 ggtggggcgt gctggcgcg cccgccaaca tggcgctgtt ccgggacagc cgtgtctcgg
 300
 ccattcttctg cggaacaaac gtggtggcgc tcgccaccaa ggcctgcacc tnnctctgga
 360
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 420
 ccacccccgc agcgcaactc ggtgccgccc ccgcgcgcgc cgctgcacgg cccgcctggg
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 720
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 909

<210> 4030

<211> 169

<212> PRT

<213> Homo sapiens

<400> 4030

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Ala	Gly	Gln	Pro	Val	Gly	Ala	Ala	Ala	Leu	Arg	Ala	Ala	Ala	Val	Gly
			20					25						30	
Arg	Gly	Pro	His	Leu	Leu	Leu	Leu	Leu	His	Ala	Ala	Ala	Gly	Ala	Ala
		35					40					45			
Val	Arg	Gly	Ala	Gln	Arg	Gly	Gln	His	Ala	Gly	Arg	Ala	His	Ser	Ala
	50					55				60					
Ala	Glu	Asp	Asp	Ala	Val	Pro	Gly	Ala	Gln	Ser	Arg	His	Arg	Gln	Cys
65				70					75					80	
Gly	Gly	Pro	Cys	Trp	Arg	Ala	Pro	Pro	Thr	Trp	Arg	Cys	Ser	Gly	Thr
			85					90						95	
Ala	Val	Ser	Arg	Pro	Ser	Ser	Ser	Ala	Lys	Thr	Trp	Trp	Arg	Ser	Pro
			100					105					110		
Pro	Arg	Pro	Ala	Pro	Xaa	Pro	Gly	Val	Pro	Pro	Pro	Gly	Ala	Arg	Leu

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<400> 4031
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120
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180
actacagctg caagaacttt tccagataaa aaggaacgtg aagaaataca gactttaaaa
240
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300
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360
gaaataaaaag tgatggaaaag attccgactg gatgcctgga agagagcaga agccatagag
420
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480
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600
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720
gaaaaggttt ataagaatgg gtgccgtgtt atactgtttc ccaatggaac tcgaaaggaa
780
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840
atgccagacc aaagagtgat ctactactat gcagctgccc agaccactca cacgacatac
900
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960
ggaagaaaag aaatcacgtt tcctgaccag actgttaaaa acttattttcc tgatggacaa
1020
gaagaaagca ttttcccaga tggtaaat gtcagagtac aacgtgatgg caacaaactc
1080
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1140
ccagatggca ctgttaaaac cgtatatgca aacggtcatc aagaaacgaa gtacagatcc
1200
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<210> 4032

<211> 418

<212> PRT

<213> Homo sapiens

<400> 4032

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Ala	Leu	Glu	Lys	Leu	Arg	Lys	Glu	Ile	Ala	Gly	Phe	Glu	Gln	Gln	Lys
			20					25					30		
Ala	Lys	Glu	Leu	Ala	Arg	Ile	Glu	Glu	Phe	Lys	Lys	Glu	Glu	Met	Arg
		35					40					45			
Lys	Leu	Gln	Lys	Glu	Arg	Lys	Val	Phe	Glu	Lys	Tyr	Thr	Thr	Ala	Ala
	50					55					60				
Arg	Thr	Phe	Pro	Asp	Lys	Lys	Glu	Arg	Glu	Glu	Ile	Gln	Thr	Leu	Lys
65					70				75					80	
Gln	Gln	Ile	Ala	Asp	Leu	Arg	Glu	Asp	Leu	Lys	Arg	Lys	Glu	Thr	Lys
			85					90					95		
Trp	Ser	Ser	Thr	His	Ser	Arg	Leu	Arg	Ser	Gln	Ile	Gln	Met	Leu	Val
			100					105					110		
Arg	Glu	Asn	Thr	Asp	Leu	Arg	Glu	Glu	Ile	Lys	Val	Met	Glu	Arg	Phe
		115					120					125			
Arg	Leu	Asp	Ala	Trp	Lys	Arg	Ala	Glu	Ala	Ile	Glu	Ser	Ser	Leu	Glu
	130					135					140				
Val	Glu	Lys	Lys	Asp	Lys	Leu	Ala	Asn	Thr	Ser	Val	Arg	Phe	Gln	Asn
145					150					155				160	
Ser	Gln	Ile	Ser	Ser	Gly	Thr	Gln	Val	Glu	Lys	Tyr	Lys	Lys	Asn	Tyr
			165					170					175		
Leu	Pro	Met	Gln	Gly	Asn	Pro	Pro	Arg	Arg	Ser	Lys	Ser	Ala	Pro	Pro
			180					185					190		
Arg	Asp	Leu	Gly	Asn	Leu	Asp	Lys	Gly	Gln	Ala	Ala	Ser	Pro	Arg	Glu
	195						200					205			
Pro	Leu	Glu	Pro	Leu	Asn	Phe	Pro	Asp	Pro	Glu	Tyr	Lys	Glu	Glu	Glu
	210					215					220				
Glu	Asp	Gln	Asp	Ile	Gln	Gly	Glu	Ile	Ser	His	Pro	Asp	Gly	Lys	Val
225					230					235				240	
Glu	Lys	Val	Tyr	Lys	Asn	Gly	Cys	Arg	Val	Ile	Leu	Phe	Pro	Asn	Gly
			245					250					255		
Thr	Arg	Lys	Glu	Val	Ser	Ala	Asp	Gly	Lys	Thr	Ile	Thr	Val	Thr	Phe
			260					265					270		
Phe	Asn	Gly	Asp	Val	Lys	Gln	Val	Met	Pro	Asp	Gln	Arg	Val	Ile	Tyr
	275						280					285			
Tyr	Tyr	Ala	Ala	Ala	Gln	Thr	Thr	His	Thr	Thr	Tyr	Pro	Glu	Gly	Leu
	290					295					300				
Glu	Val	Leu	His	Phe	Ser	Ser	Gly	Gln	Ile	Glu	Lys	His	Tyr	Pro	Asp

305 310 315 320
 Gly Arg Lys Glu Ile Thr Phe Pro Asp Gln Thr Val Lys Asn Leu Phe
 325 330 335
 Pro Asp Gly Gln Glu Glu Ser Ile Phe Pro Asp Gly Thr Ile Val Arg
 340 345 350
 Val Gln Arg Asp Gly Asn Lys Leu Ile Glu Phe Asn Asn Gly Gln Arg
 355 360 365
 Glu Leu His Thr Ala Gln Phe Lys Arg Arg Glu Tyr Pro Asp Gly Thr
 370 375 380
 Val Lys Thr Val Tyr Ala Asn Gly His Gln Glu Thr Lys Tyr Arg Ser
 385 390 395 400
 Gly Arg Ile Arg Val Lys Asp Lys Glu Gly Asn Val Leu Met Asp Thr
 405 410 415
 Glu Leu

<210> 4033
 <211> 487
 <212> DNA
 <213> Homo sapiens

<400> 4033
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 120
 tcaagaagag ccctcctagt ttggcctcta actggctgtg cgaccccagg caggtcactt
 180
 gtcctctctg ggaagcagct gaataatgaa cactgggatt ttcccaggct ggcttctcac
 240
 tgcagagcag aggaaaagca ttctgggggc ctgctatgga gggtcattta tccagtttac
 300
 aacttccacg gccggccctc aatggcttcc tttctctccc acaagagcgc tgggccaagc
 360
 cagctctgca ccagttggac gccttccaag aaaaactcag gctccggggg ctgcttgtca
 420
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 480
 ccagtcc
 487

<210> 4034
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 4034
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 1 5 10 15
 Lys Ser Ile Leu Gly Ala Cys Tyr Gly Gly Ser Phe Ile Gln Phe Thr
 20 25 30
 Thr Ser Thr Ala Gly Pro Gln Trp Leu Pro Phe Ser Pro Thr Arg Ala
 35 40 45
 Leu Gly Gln Ala Ser Ser Ala Pro Val Gly Arg Leu Pro Arg Lys Thr

50		55		60											
Gln	Ala	Pro	Gly	Ala	Ala	Cys	Gln	Asp	Gln	Thr	Gly	Gly	Leu	Ala	Pro
65				70				75							80
Pro	Pro	Ala	Met	Cys	Gly	Glu	Arg	Ala	Ser	Pro	Ser	Gln	Ser		
			85					90							

<210> 4035
 <211> 343
 <212> DNA
 <213> Homo sapiens

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 120
 tcctatggga gggacaaact ctcagaaaat agcaagagta ttttggaatc ctatctgagg
 180
 tataaacact cagaacctca tagcagtgtt caggaatcct atgtgaggga caaacattca
 240
 gaccacagca ggagcattct agaatcctat ttgaggaaca aacattcaga caatcgtagc
 300
 agtgttcttg aatccttttt ttttttgaag ctttcaatct ctt
 343

<210> 4036
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 4036
 Xaa Leu Asn Ser Ser Val Met Glu Phe His Val Arg His Lys His Ser
 1 5 10 15
 Asp Asn Pro Ser Asn Val Leu Glu Ser Tyr Val Arg Asp Lys His Ser
 20 25 30
 Asp Pro Ser Ser Asn Val Leu Glu Ser Tyr Gly Arg Asp Lys Leu Ser
 35 40 45
 Glu Asn Ser Lys Ser Ile Leu Glu Ser Tyr Leu Arg Tyr Lys His Ser
 50 55 60
 Glu Pro His Ser Ser Val Gln Glu Ser Tyr Val Arg Asp Lys His Ser
 65 70 75 80
 Asp His Ser Arg Ser Ile Leu Glu Ser Tyr Leu Arg Asn Lys His Ser
 85 90 95
 Asp Asn Arg Ser Ser Val Leu Glu Ser Phe Phe Phe Leu Lys Leu Ser
 100 105 110
 Ile Ser

<210> 4037
 <211> 741
 <212> DNA
 <213> Homo sapiens

<400> 4037

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 120
 ggaggagaag gggttggtct tgctgtctca gggcggcaga ggcagaagag aatctgagca
 180
 tacgtggacc tgtagccagg tgggcataga taaaaggaaa tattgtttgc cagtccttgc
 240
 tggaatgatg cctttacaca tctgtctgat ctgattgctc cactgttttc tgacttctct
 300
 tccctttcca gggttctagc ctgttcatct agcccatga tggctgtgga catcgagtac
 360
 agatacaact gcatggctcc ttccttgccg caagagaggt ttgcctttaa gatctcacca
 420
 aagcccagca aaccactgag gccttgtatt cagctgagca gcaagaatga agccagtgga
 480
 atggtggccc cggtgtcca ggagaagaag gtgaaaaagc ggggtgtcctt cgcagacaac
 540
 caggggctgg ccctgacaat ggtcaaagtg ttctcggaat tcgatgaccc gctagatatg
 600
 ccattcaaca tcaccgagct cctagacaac attgtgagct tgacgacagc agagagcgag
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 720
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 741

<210> 4038

<211> 134

<212> PRT

<213> Homo sapiens

<400> 4038

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Arg	Gln	Glu	Arg	Phe	Ala	Phe	Lys	Ile	Ser	Pro	Lys	Pro	Ser	Lys	Pro
			20					25					30		
Leu	Arg	Pro	Cys	Ile	Gln	Leu	Ser	Ser	Lys	Asn	Glu	Ala	Ser	Gly	Met
		35					40					45			
Val	Ala	Pro	Ala	Val	Gln	Glu	Lys	Lys	Val	Lys	Lys	Arg	Val	Ser	Phe
	50					55					60				
Ala	Asp	Asn	Gln	Gly	Leu	Ala	Leu	Thr	Met	Val	Lys	Val	Phe	Ser	Glu
65					70				75					80	
Phe	Asp	Asp	Pro	Leu	Asp	Met	Pro	Phe	Asn	Ile	Thr	Glu	Leu	Leu	Asp
			85						90					95	
Asn	Ile	Val	Ser	Leu	Thr	Thr	Ala	Glu	Ser	Glu	Ser	Phe	Val	Leu	Asp
			100					105					110		
Phe	Ser	Gln	Pro	Ser	Ala	Asp	Tyr	Leu	Asp	Phe	Arg	Asn	Arg	Leu	Gln
		115					120					125			
Ala	Asp	His	Val	Cys	Leu										

<210> 4039

<211> 1503

<212> DNA

<213> Homo sapiens

<400> 4039

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120
gagcggaggag ccctcgcacg cgctagtctg cgagtgcgag ctcagcccgg cacctgttcc
180
tccagcgccg ccgccttccc acccctcgga cccgcgcgcg tcgcggcgcc cgcccgttcc
240
tgcgatgaat ccggccctag gcaaccagac ggacgtggcg ggccttctct gccaacagca
300
gcgagggcgt ggagcgagcc gtgcgctgct gcaccagggc gtccgtggtg accgacgacg
360
gcttcgcgga gggaggcccg gacgagcgta gcctgtacat aatgcgcgtg gtgcagatcg
420
cggtcatgtg cgtgctctca ctcaccgtgg tcttcggcat cttcttcttc ggctgcaatc
480
tgctcatcaa gtccgagggc atgatcaact tcctcgtgaa ggaccggagg ccgtctaagg
540
aggtggaggc ggtggtcgtg gggccctact gaccgcctct ctgccccgcg ggcaaccgct
600
cccacgcctg ccacttttgc tagcccggtg gtgcccctca ctatcagaga ctgggcgaag
660
caaaccctgt ggagtcaatt atttctctcg acttcggcct ttcggaaaga agcgaccggt
720
ttctccctcg ccctctgaaa gtccctcatgc ctggcagtcg gaggagagcg cccagactct
780
gaactcagca gaaagtggca agaagagggc gattagggcg cagaactttg gaagctgcta
840
cttacttgga atgcggggag accgacggtg cgaaggccct tctccaccgg caggtggggc
900
aagctctggg ggcaggtgga gagggcgggc aggggagaga cccagcggca ctgatcgccct
960
tgtgaccgga agagtgcct gttaaaagcc acgcagcaga ctcattgggt ctcacaaatc
1020
cgtgtccggg tgcgtccca cttcttctct gctccccccc tgcccctgga ggggaggggc
1080
gataaatacc tttgattgta acgtgccgtt ttaagaggtt ttgtgtttgt ttgcttgaat
1140
acaaatgttt gataagtctt tttctgcccc agtggcctgt ttgcctgcct gaggagttac
1200
agttttgcga ttgtggaaga aggggtgggg ggagggggag cctgcgaatt tgaacggggg
1260
gagttgtttc ttttagtgca tttccactg ggtcttttgg gaggcgtcta gcgttcctgc
1320
tgccctggg acaaagaccc agaatagaac tcgtagctcg tgactgcacg gtttacgcca
1380
caaaagtgt cttgacatcc gtgacaccgt tttgactttt tgtttttttt ttattttaaca
1440
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1500

aaa
1503

<210> 4040
<211> 100
<212> PRT
<213> Homo sapiens

<400> 4040
Lys Ser Leu Ala Ala Ala Arg Val Gly Glu Ala Pro Gly Glu Thr Pro
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Thr Ala Gln Gly Leu Ser Lys Ala Glu Arg Gly Ala Leu Ala Arg Ala
20 25 30
Ser Leu Arg Val Ser Ala Gln Pro Gly Thr Cys Ser Ser Ser Ala Ala
35 40 45
Ala Phe Pro Pro Leu Gly Pro Ala Pro Leu Ala Ala Pro Ala Arg Ser
50 55 60
Cys Asp Glu Ser Gly Pro Arg Gln Pro Asp Gly Arg Gly Gly Pro Ser
65 70 75 80
Trp Pro Thr Ala Ala Arg Arg Trp Ser Glu Pro Cys Ala Ala Ala Pro
85 90 95
Arg Arg Pro Trp
100

<210> 4041
<211> 573
<212> DNA
<213> Homo sapiens

<400> 4041
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ggtgagattc cagctgaatt aagggcgggc gccactgacc accggcagga gctaattgaa
120
tgtgttgcca attcagatga acagcttggt gagatgtttc tggaagaaaa aatcccctcg
180
atctctgatt taaagctagc aattcgaaga gctactctga aaagatcatt tactcctgta
240
tttttgggaa gcgccttgaa gaacaaagga gttcagcctc ttttagatgc tgtttttagaa
300
tacctcccaa atccatctga agtccagaac tatgctattc tcaataaaga ggatgactca
360
aaagagaaaa ccaaaatcct aatgaactcc agtagagaca attcccaccc atttgtaggc
420
ctggctttta aactggaggt aggtcgattt ggacaattaa cttatgttcg cagttatcag
480
ggagagctaa agaagggtga caccatctat aacacaagga caagaaagaa agtacggttg
540
caacggctgg ctcgcatgca tgccgacatg atg
573

<210> 4042
<211> 191
<212> PRT

<213> Homo sapiens

<400> 4042

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Asp Leu Ile Glu Glu Arg Ala Ile Tyr Phe Asp Gly Asp Phe Gly Gln
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Ile Val Arg Tyr Gly Glu Ile Pro Ala Glu Leu Arg Ala Ala Ala Thr
      20             25             30
Asp His Arg Gln Glu Leu Ile Glu Cys Val Ala Asn Ser Asp Glu Gln
      35             40             45
Leu Gly Glu Met Phe Leu Glu Glu Lys Ile Pro Ser Ile Ser Asp Leu
      50             55             60
Lys Leu Ala Ile Arg Arg Ala Thr Leu Lys Arg Ser Phe Thr Pro Val
65             70             75             80
Phe Leu Gly Ser Ala Leu Lys Asn Lys Gly Val Gln Pro Leu Leu Asp
      85             90             95
Ala Val Leu Glu Tyr Leu Pro Asn Pro Ser Glu Val Gln Asn Tyr Ala
      100            105            110
Ile Leu Asn Lys Glu Asp Asp Ser Lys Glu Lys Thr Lys Ile Leu Met
      115            120            125
Asn Ser Ser Arg Asp Asn Ser His Pro Phe Val Gly Leu Ala Phe Lys
      130            135            140
Leu Glu Val Gly Arg Phe Gly Gln Leu Thr Tyr Val Arg Ser Tyr Gln
145            150            155            160
Gly Glu Leu Lys Lys Gly Asp Thr Ile Tyr Asn Thr Arg Thr Arg Lys
      165            170            175
Lys Val Arg Leu Gln Arg Leu Ala Arg Met His Ala Asp Met Met
      180            185            190

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<210> 4043

<211> 744

<212> DNA

<213> Homo sapiens

<400> 4043

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120
ctcccaaaaa aagacccaaa agttaaaggt gtccaatcag cagctgtaca agcttttctt
180
aaaaggaaaag aagaggagct gagacgaaaa gccttagagg agaaaaggag aaaagaggaa
240
ctagtgaaaa agcgaattga gctcaaacat gacaagaaag caagagctat ggccaagagg
300
acaaaggata atttccatgg ttacaatggg attcctattg aggaaaagtc aaagaagagg
360
caggcaacag aaagccatac cagccaagga accgaccgag agtatgaaat ggaagaagag
420
aatgaattcc tcgagtacaa tcacgcagag tcagagcagg agtatgagga agagcaagaa
480
cctcccaaag ttgaaagcaa accaaaggct tcccttaaag gtgccccacc acctatgaac
540
ttcactgatt tactcaggct ggctgagaaa aagcagtttg aaccagtgga aatcaaggta
600

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gtgaagaaat cagaagagcg acctatgacc gcagaagaac ttagggagcg agaattcctt
 660
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 720
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 744

<210> 4044
 <211> 219
 <212> PRT
 <213> Homo sapiens

<400> 4044
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 Arg Lys Glu Glu Glu Leu Arg Arg Lys Ala Leu Glu Glu Lys Arg Arg
 35 40 45
 Lys Glu Glu Leu Val Lys Lys Arg Ile Glu Leu Lys His Asp Lys Lys
 50 55 60
 Ala Arg Ala Met Ala Lys Arg Thr Lys Asp Asn Phe His Gly Tyr Asn
 65 70 75 80
 Gly Ile Pro Ile Glu Glu Lys Ser Lys Lys Arg Gln Ala Thr Glu Ser
 85 90 95
 His Thr Ser Gln Gly Thr Asp Arg Glu Tyr Glu Met Glu Glu Glu Asn
 100 105 110
 Glu Phe Leu Glu Tyr Asn His Ala Glu Ser Glu Gln Glu Tyr Glu Glu
 115 120 125
 Glu Gln Glu Pro Pro Lys Val Glu Ser Lys Pro Lys Val Ser Leu Lys
 130 135 140
 Gly Ala Pro Pro Pro Met Asn Phe Thr Asp Leu Leu Arg Leu Ala Glu
 145 150 155 160
 Lys Lys Gln Phe Glu Pro Val Glu Ile Lys Val Val Lys Lys Ser Glu
 165 170 175
 Glu Arg Pro Met Thr Ala Glu Glu Leu Arg Glu Arg Glu Phe Leu Glu
 180 185 190
 Arg Lys His Arg Arg Lys Lys Leu Glu Thr Asp Gly Lys Leu Pro Pro
 195 200 205
 Thr Val Ser Lys Lys Ala Pro Leu Gly Arg Lys
 210 215

<210> 4045
 <211> 2217
 <212> DNA
 <213> Homo sapiens

<400> 4045
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 120
 aattgaaaaa aacttagaat tttaaagctg agaaagagtt atcgctgtga tgattttgtg
 180

gttaatgaca ccaagctggg actggtacag aaagtcagag aacacttaca gaacttggaa
240
aactcagctt tcacagctga caggcataag aaaagaaaac ttttggaaaa ctcaacacta
300
aacagcaagt tattaagaagt aaatggaagc accactgcca tttgtgccac aggccttcgg
360
aatttgggga acacatgttt catgaatgcc atccttcagt cactcagtaa cattgagcag
420
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480
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600
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720
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840
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1020
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1140
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1320
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1680
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 1920
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 1980
 agaccaggta attactgctt gtctctcaag gctgctgtct ttatcagcac taactaaata
 2040
 aatttggttg ttcagttgta cttgtcctgc aaatacaaga attactctct ttgttggttt
 2100
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 2160
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 2217

<210> 4046

<211> 437

<212> PRT

<213> Homo sapiens

<400> 4046

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Phe	Val	Val	Asn	Asp	Thr	Lys	Leu	Gly	Leu	Val	Gln	Lys	Val	Arg	Glu
			20					25					30		
His	Leu	Gln	Asn	Leu	Glu	Asn	Ser	Ala	Phe	Thr	Ala	Asp	Arg	His	Lys
		35					40					45			
Lys	Arg	Lys	Leu	Leu	Glu	Asn	Ser	Thr	Leu	Asn	Ser	Lys	Leu	Leu	Lys
	50					55					60				
Val	Asn	Gly	Ser	Thr	Thr	Ala	Ile	Cys	Ala	Thr	Gly	Leu	Arg	Asn	Leu
65					70					75				80	
Gly	Asn	Thr	Cys	Phe	Met	Asn	Ala	Ile	Leu	Gln	Ser	Leu	Ser	Asn	Ile
			85						90					95	
Glu	Gln	Phe	Cys	Cys	Tyr	Phe	Lys	Glu	Leu	Pro	Ala	Val	Glu	Leu	Arg
			100					105					110		
Asn	Gly	Lys	Thr	Ala	Gly	Arg	Arg	Thr	Tyr	His	Thr	Arg	Ser	Gln	Gly
		115				120						125			
Asp	Asn	Asn	Val	Ser	Leu	Val	Glu	Glu	Phe	Arg	Lys	Thr	Leu	Cys	Ala
	130					135					140				
Leu	Trp	Gln	Gly	Ser	Gln	Thr	Ala	Phe	Ser	Pro	Glu	Ser	Leu	Phe	Tyr
145					150					155				160	
Val	Val	Trp	Lys	Ile	Met	Pro	Asn	Phe	Arg	Gly	Tyr	Gln	Gln	Gln	Asp
			165					170					175		
Ala	His	Glu	Phe	Xaa	Ala	Leu	Pro	Phe	Gly	Pro	Pro	Thr	Leu	Gly	Xaa
			180					185					190		
Phe	Arg	Ala	Val	Ser	Thr	Val	Phe	Pro	Ala	Gln	Gln	Phe	Cys	Arg	Arg
	195					200						205			
Ile	Leu	Leu	Cys	Leu	Gln	Val	Xaa	Lys	Cys	Cys	Ile	Asn	Gly	Ala	Ser
	210					215					220				
Thr	Val	Val	Thr	Ala	Ile	Phe	Gly	Gly	Ile	Leu	Gln	Asn	Glu	Val	Asn
225					230					235				240	
Cys	Leu	Ile	Cys	Gly	Thr	Glu	Ser	Arg	Lys	Phe	Asp	Pro	Phe	Leu	Asp
			245					250					255		
Leu	Ser	Leu	Asp	Ile	Pro	Ser	Gln	Phe	Arg	Ser	Lys	Arg	Ser	Lys	Asn

	260		265		270										
Gln	Glu	Asn	Gly	Pro	Val	Cys	Ser	Leu	Arg	Asp	Cys	Leu	Arg	Ser	Phe
	275		280		285										
Thr	Asp	Leu	Glu	Glu	Leu	Asp	Glu	Thr	Glu	Leu	Tyr	Met	Cys	His	Lys
	290		295		300										
Cys	Lys	Xaa	Lys	Gln	Lys	Ser	Thr	Lys	Lys	Phe	Trp	Ile	Gln	Lys	Leu
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Pro	Lys	Val	Leu	Cys	Leu	His	Leu	Lys	Arg	Phe	His	Trp	Thr	Ala	Tyr
	325		330		335										
Leu	Arg	Asn	Lys	Val	Asp	Thr	Tyr	Val	Glu	Phe	Pro	Leu	Arg	Gly	Leu
	340		345		350										
Asp	Met	Lys	Cys	Tyr	Leu	Leu	Asp	Pro	Glu	Asn	Ser	Gly	Pro	Glu	Ser
	355		360		365										
Cys	Leu	Tyr	Asp	Leu	Ala	Ala	Val	Val	Val	His	His	Gly	Ser	Gly	Val
370			375		380										
Gly	Ser	Gly	His	Tyr	Thr	Ala	Tyr	Ala	Thr	His	Glu	Gly	Arg	Trp	Phe
385			390		395										400
His	Phe	Asn	Asp	Ser	Thr	Val	Thr	Leu	Thr	Asp	Glu	Glu	Thr	Val	Val
	405		410		415										
Lys	Ala	Lys	Ala	Asn	Ile	Leu	Phe	Tyr	Val	Glu	His	Gln	Ala	Lys	Ala
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Gly	Ser	Asp	Lys	Leu											
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<211> 809

<212> DNA

<213> Homo sapiens

<400> 4047

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<210> 4048

<211> 118

<212> PRT

<213> Homo sapiens

<400> 4048

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			20					25					30		
Val	Ala	Ile	Gly	Phe	Thr	Gly	Gly	Leu	Val	Phe	Met	Tyr	Val	Gln	Cys
		35					40					45			
Lys	Val	Tyr	Val	Gln	Leu	Trp	Arg	Arg	Leu	Lys	Ala	Tyr	Asn	Arg	Val
	50					55					60				
Ile	Phe	Val	Gln	Asn	Cys	Pro	Asp	Thr	Ala	Lys	Lys	Leu	Glu	Lys	Asn
65				70						75				80	
Phe	Ser	Cys	Asn	Val	Asn	Thr	Asp	Ile	Lys	Asp	Ala	Val	Val	Val	Pro
			85						90				95		
Val	Pro	Gln	Thr	Gly	Ala	Asn	Ser	Leu	Pro	Ser	Ala	Glu	Gly	Gly	Pro
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<210> 4049

<211> 1211

<212> DNA

<213> Homo sapiens

<400> 4049

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<210> 4050

<211> 403

<212> PRT

<213> Homo sapiens

<400> 4050

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		20						25					30		
Phe	Glu	Gly	His	Lys	Leu	Ile	Ala	His	Trp	Phe	Arg	Gly	Tyr	Leu	Ile
		35					40					45			
Ile	Val	Ser	Arg	Asp	Arg	Lys	Val	Ser	Pro	Lys	Ser	Glu	Phe	Thr	Ser
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65					70					75					80
Cys	Asn	Lys	Phe	Ile	Ala	Tyr	Ser	Thr	Val	Phe	Glu	Asp	Val	Val	Asp
			85						90					95	
Val	Leu	Ala	Glu	Trp	Gly	Ser	Leu	Tyr	Val	Leu	Thr	Arg	Asp	Gly	Arg
		100						105					110		
Val	His	Ala	Leu	Gln	Glu	Lys	Asp	Thr	Gln	Thr	Lys	Leu	Glu	Met	Leu
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Phe	Lys	Lys	Asn	Leu	Phe	Glu	Met	Ala	Ile	Asn	Leu	Ala	Lys	Ser	Gln
	130					135						140			
His	Leu	Asp	Ser	Asp	Gly	Leu	Ala	Gln	Ile	Phe	Met	Gln	Tyr	Gly	Asp
145					150					155					160
His	Leu	Tyr	Ser	Lys	Gly	Asn	His	Asp	Gly	Ala	Val	Gln	Gln	Tyr	Ile
			165						170					175	
Arg	Thr	Ile	Gly	Lys	Leu	Glu	Pro	Ser	Tyr	Val	Ile	Arg	Lys	Phe	Leu
		180						185					190		
Asp	Ala	Gln	Arg	Ile	His	Asn	Leu	Thr	Ala	Tyr	Leu	Gln	Thr	Leu	His

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Arg	Gln Ser Leu Ala Asn Ala Asp His Thr Thr	Leu Leu Leu Asn Cys				
210		215	220			
Tyr Thr Lys Leu Lys Asp Ser Ser Lys Leu Glu Glu Phe Ile Lys Lys						
225	230	235	240			
Lys Ser Glu Ser Glu Val His Phe Asp Val Glu Thr Ala Ile Lys Val						
	245	250	255			
Leu Arg Gln Ala Gly Tyr Tyr Ser His Ala Leu Tyr Leu Ala Glu Asn						
	260	265	270			
His Ala His His Glu Trp Tyr Leu Lys Ile Gln Leu Glu Asp Ile Lys						
	275	280	285			
Asn Tyr Gln Glu Ala Leu Arg Tyr Ile Gly Lys Leu Pro Phe Glu Gln						
290	295	300				
Ala Glu Ser Asn Met Lys Arg Tyr Gly Lys Ile Leu Met His His Ile						
305	310	315	320			
Pro Glu Gln Thr Thr Gln Leu Leu Lys Gly Leu Cys Thr Asp Tyr Arg						
	325	330	335			
Pro Ser Leu Glu Gly Arg Ser Asp Arg Glu Ala Pro Gly Cys Arg Ala						
	340	345	350			
Asn Ser Glu Glu Phe Ile Pro Ile Phe Ala Asn Asn Pro Arg Glu Leu						
	355	360	365			
Lys Ala Phe Leu Glu His Met Ser Glu Val Gln Pro Asp Ser Pro Gln						
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<210> 4051

<211> 1645

<212> DNA

<213> Homo sapiens

<400> 4051

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 240

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 420

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<211> 93

<212> PRT

<213> Homo sapiens

<400> 4052

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Gly	Gly	Asn	Ala	Trp	Gly	Gly	Ala	Cys	Leu	Pro	Ala	Pro	Tyr	Gly	Gly
		20					25					30			
Ala	Glu	Gly	Val	Arg	Pro	Pro	Pro	Gly	Pro	Ala	Pro	Leu	Pro	Pro	Gly
		35					40				45				
Pro	Thr	Lys	Pro	Leu	Pro	Pro	Ala	Pro	Pro	Ser	Met	Gly	Ser	Asp	Ser
	50					55				60					
Ser	Gly	Glu	Arg	Ser	Pro	Ser	Pro	Pro	Trp	Pro	Pro	Pro	Pro	Pro	Pro
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<211> 461
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<213> Homo sapiens

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35 40 45
Glu Gly Arg Gly Gly Ser Arg His Ser Cys Pro Arg Arg Val Gly Arg
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Arg Ser Val Leu Lys Gly Gly Gln Gly Ser Phe Val Leu Asn Arg Glu
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Gly Arg Ser Thr Thr Gly Ala Pro Ser Thr Thr Ala Asp Ser Lys Leu
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Ser Asn Gln Val Ser Thr Ile Val Ser Leu Leu Ser Thr Leu Cys Arg
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Gly Ser Pro Val Val Thr His Asp Leu Leu Arg Ser Glu Leu Pro Asp
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Ser Ile Glu Ser Ala Leu Gln Gly Asp Glu Arg Cys Val Leu Asp Thr
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180 185 190
Cys Ile Arg Ser Lys Asp Thr Asp Ala Leu Ile Asp Ala Ile Asp Thr
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Glu Arg Gly Ala Asp Val Asn Arg Gly Gln Arg Ser Ser Ser Leu His
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His Gly Ala Asn Pro Asp Leu Arg Asp Glu Asp Gly Lys Thr Pro Leu
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Asp Lys Ala Arg Glu Arg Gly His Ser Glu Val Val Ala Ile Leu Gln
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Ser Ser Gly Leu Val Gln Ala Leu Leu Thr Val Leu Asn Asn Ser Met

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      355          360          365
Arg Asp Asn Asp Lys Val Asp Ala Gln Glu Glu Asn Phe Leu Pro Lys

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370	375	380
Tyr Gln Arg Val Lys Asp Leu Cys Gln Arg Ala Glu Tyr Gln Thr Ala		
385	390	395
Cys Glu Gln Leu Gly Gln Lys Trp Gln Cys Val Glu Asp Ala Thr Gly		400
	405	410
Lys Leu Lys Leu His Lys Cys Lys Gly Pro Met Arg Leu Gly Gly Ser		415
	420	425
Arg Ala Leu Ser Asn Leu Val Pro Lys Tyr Tyr Gly Gln Gly Ser Glu		430
	435	440
Ala Cys Thr Cys Asp Ser Gly Asp Tyr Lys Leu Ser Leu Ala Gly Arg		445
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Arg Lys Lys Xaa Leu Gln Glu Glu Xaa Tyr Lys Ala Ser Tyr Val Arg		460
465	470	475
Asn Arg Ser Ile Arg Ser Val Ala Ile Glu Val Asp Gly Arg Val Tyr		480
	485	490
His Val Gly Leu Gly Asp Ala Ala Gln Pro Arg Asn Leu Thr Lys Arg		495
	500	505
His Trp Pro Gly Ala Pro Glu Asp Gln Asp Asp Lys Asp Gly Gly Asp		510
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Xaa Ser Val Ala Leu Glu Ala Phe Pro Thr Thr Gln Pro Pro Thr Xaa		525
530	535	540
Ile Lys Val Thr His Arg Cys Tyr Ile Leu Glu Asn Asp Thr Val Gln		545
	550	555
Cys Asp Leu Asp Leu Tyr Lys Ser Leu Gln Ala Trp Lys Asp His Lys		560
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Leu His Ile Asp His Glu Ile Glu Thr Leu Gln Asn Lys Ile Lys Asn		575
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Asp Cys His Lys Ile Ser Tyr His Thr Gln His Lys Gly Arg Leu Lys		605
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His Arg Gly Ser Ser Leu His Pro Phe Arg Lys Gly Leu Gln Glu Lys		620
625	630	635
Asp Lys Val Trp Leu Leu Arg Glu Gln Lys Arg Lys Lys Lys Leu Arg		640
	645	650
Lys Leu Leu Lys Arg Leu Gln Asn Asn Asp Thr Cys Ser Met Pro Gly		655
	660	665
Leu Thr Cys Phe Thr His Asp Asn Gln His Trp Gln Thr Ala Pro Phe		670
	675	680
Trp Thr Leu Gly Pro Phe Cys Ala Cys Thr Ser Ala Asn Asn Asn Thr		685
	690	695
Tyr Trp Cys Met Arg Thr Ile Asn Glu Thr His Asn Phe Leu Phe Cys		700
705	710	715
Glu Phe Ala Thr Gly Phe Leu Glu Tyr Phe Asp Leu Asn Thr Asp Pro		720
	725	730
Tyr Gln Leu Met Asn Ala Val Asn Thr Leu Asp Arg Asp Val Leu Asn		735
	740	745
Gln Leu His Val Gln Leu Met Glu Leu Arg Ser Cys Lys Gly Tyr Lys		750
	755	760
Gln Cys Asn Pro Arg Thr Arg Asn Met Asp Leu Gly Leu Lys Asp Gly		765
	770	775
Gly Ser Tyr Glu Gln Tyr Arg Gln Phe Gln Arg Arg Lys Trp Pro Glu		780
785	790	795
Met Lys Arg Pro Ser Ser Lys Ser Leu Gly Gln Leu Trp Glu Gly Trp		800

3254

	100		105		110										
Lys	Gly	Tyr	Glu	Glu	Asp	Val	Gly	Arg	Met	Thr	Met	Ile	Arg	Val	Val
	115		120		125										
Ser	His	Thr	Ser	Val	Pro	Leu	Leu	Leu	Lys	Asn	Pro	Asp	Tyr	Phe	Phe
	130		135		140										
Lys	Glu	Ala	Asn	Thr	Thr	Ile	Tyr	Val	Ile	Trp	Gly	Pro	Phe	Arg	Asn
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Met	Arg	Lys	Asp	Gly	Asn	Gly	Ile	Val	Tyr	Asn	Met	Leu	Lys	Lys	Thr
			165		170										175
Val	Gly	Ile	Tyr	Pro	Asn	Ala	Gln	Ile	Tyr	Val	Thr	Thr	Glu	Lys	Arg
			180		185										190
Met	Ser	Tyr	Cys	Asp	Gly	Val	Leu	Arg	Arg	Lys	Xaa	Gly	Lys	Asp	Ser
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<210> 4067

<211> 1800

<212> DNA

<213> Homo sapiens

<400> 4067

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960

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<210> 4068

<211> 521

<212> PRT

<213> Homo sapiens

<400> 4068

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			20					25					30		
Arg	Lys	Ile	Pro	Cys	Asp	Val	Thr	Glu	Ala	Glu	Ile	Ile	Ser	Leu	Gly
		35					40					45			
Leu	Pro	Phe	Gly	Lys	Val	Thr	Asn	Leu	Leu	Met	Leu	Lys	Gly	Lys	Ser
	50					55				60					
Gln	Ala	Phe	Leu	Glu	Met	Ala	Ser	Glu	Glu	Ala	Ala	Val	Thr	Met	Val
65					70					75				80	
Asn	Tyr	Tyr	Thr	Pro	Ile	Thr	Pro	His	Leu	Arg	Ser	Gln	Pro	Val	Tyr
			85					90					95		
Ile	Gln	Tyr	Ser	Asn	His	Arg	Glu	Leu	Lys	Thr	Asp	Asn	Leu	Pro	Asn
			100					105					110		
Gln	Ala	Arg	Ala	Gln	Ala	Ala	Leu	Gln	Ala	Val	Ser	Ala	Val	Gln	Ser
		115					120					125			
Gly	Ser	Leu	Ala	Leu	Ser	Gly	Gly	Pro	Ser	Asn	Glu	Gly	Thr	Val	Leu
	130					135					140				
Pro	Gly	Gln	Ser	Pro	Val	Leu	Arg	Ile	Ile	Ile	Glu	Asn	Leu	Phe	Tyr

145		150		155		160									
Pro	Val	Thr	Leu	Glu	Val	Leu	His	Gln	Ile	Phe	Ser	Lys	Phe	Gly	Thr
				165					170						175
Val	Leu	Lys	Ile	Ile	Thr	Phe	Thr	Lys	Asn	Asn	Gln	Phe	Gln	Ala	Leu
			180					185					190		
Leu	Gln	Tyr	Ala	Asp	Pro	Val	Asn	Ala	His	Tyr	Ala	Lys	Met	Ala	Leu
		195					200					205			
Asp	Gly	Gln	Asn	Ile	Tyr	Asn	Ala	Cys	Cys	Thr	Leu	Arg	Ile	Asp	Phe
	210					215					220				
Ser	Lys	Leu	Thr	Ser	Leu	Asn	Val	Lys	Tyr	Asn	Asn	Asp	Lys	Ser	Arg
225					230					235					240
Asp	Phe	Thr	Arg	Leu	Asp	Leu	Pro	Thr	Gly	Asp	Gly	Gln	Pro	Ser	Leu
			245						250					255	
Glu	Pro	Pro	Met	Ala	Ala	Ala	Phe	Gly	Ala	Pro	Gly	Ile	Ile	Ser	Ser
			260					265					270		
Pro	Tyr	Ala	Gly	Ala	Ala	Gly	Phe	Ala	Pro	Ala	Ile	Gly	Phe	Pro	Gln
	275						280					285			
Ala	Thr	Gly	Leu	Ser	Val	Pro	Ala	Val	Pro	Gly	Ala	Leu	Gly	Pro	Leu
	290					295					300				
Thr	Ile	Thr	Ser	Ser	Ala	Val	Thr	Gly	Arg	Met	Ala	Ile	Pro	Gly	Ala
305					310					315					320
Ser	Gly	Ile	Pro	Gly	Asn	Ser	Val	Leu	Leu	Val	Thr	Asn	Leu	Asn	Pro
			325						330				335		
Asp	Leu	Ile	Thr	Pro	His	Gly	Leu	Phe	Ile	Leu	Phe	Gly	Val	Tyr	Gly
		340					345						350		
Asp	Val	His	Arg	Val	Lys	Ile	Met	Phe	Asn	Lys	Lys	Glu	Asn	Ala	Leu
	355						360					365			
Val	Gln	Met	Ala	Asp	Ala	Asn	Gln	Ala	Gln	Leu	Ala	Met	Asn	His	Leu
	370					375					380				
Ser	Gly	Gln	Arg	Leu	Tyr	Gly	Lys	Val	Leu	Arg	Ala	Thr	Leu	Ser	Lys
385					390					395					400
His	Gln	Ala	Val	Gln	Leu	Pro	Arg	Glu	Gly	Gln	Glu	Asp	Gln	Gly	Leu
			405						410					415	
Thr	Lys	Asp	Phe	Ser	Asn	Ser	Pro	Leu	His	Arg	Phe	Lys	Lys	Pro	Gly
		420						425					430		
Ser	Lys	Asn	Phe	Gln	Asn	Ile	Phe	Pro	Pro	Ser	Ala	Thr	Leu	His	Leu
	435						440					445			
Ser	Asn	Ile	Pro	Pro	Ser	Val	Thr	Val	Asp	Asp	Leu	Lys	Asn	Leu	Phe
	450					455					460				
Ile	Glu	Ala	Gly	Cys	Ser	Val	Lys	Ala	Phe	Lys	Phe	Phe	Gln	Lys	Asp
465					470					475					480
Arg	Lys	Met	Ala	Leu	Ile	Gln	Leu	Gly	Ser	Val	Glu	Glu	Ala	Ile	Gln
			485					490						495	
Ala	Leu	Ile	Glu	Leu	His	Asn	His	Asp	Leu	Gly	Glu	Asn	His	His	Leu
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Arg	Val	Ser	Phe	Ser	Lys	Ser	Thr	Ile							
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<210> 4069

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4069

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120
ttccagcaca cccagcatct ggcaatatca aagcataatc ttatgttcct ttataccatc
180
tttattgtgg ccacaaagat aaccatgatg actacacaga cttctactat gacatttgct
240
ccttttgagg atacattgag ttggatgcta tttggctggc agcagccggt ttcatcatgt
300
gagaagaaaa gtgaagcaaa gtcaccttcc aatggcgTtg ggtcattggc ctcaaagccg
360
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420
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480
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540
aagaaattct ttgtttgagg gagacttccc ctttctggat tgtatttgta gagtgttacg
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<210> 4070

<211> 113

<212> PRT

<213> Homo sapiens

<400> 4070

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			20					25					30		
Leu	Tyr	Thr	Ile	Phe	Ile	Val	Ala	Thr	Lys	Ile	Thr	Met	Met	Thr	Thr
		35					40					45			
Gln	Thr	Ser	Thr	Met	Thr	Phe	Ala	Pro	Phe	Glu	Asp	Thr	Leu	Ser	Trp
	50					55					60				
Met	Leu	Phe	Gly	Trp	Gln	Gln	Pro	Phe	Ser	Ser	Cys	Glu	Lys	Lys	Ser
65					70				75					80	
Glu	Ala	Lys	Ser	Pro	Ser	Asn	Gly	Val	Gly	Ser	Leu	Ala	Ser	Lys	Pro
				85					90					95	
Val	Asp	Val	Ala	Ser	Asp	Asn	Val	Lys	Lys	Lys	His	Thr	Lys	Lys	Asn
			100					105						110	
Glu															

<210> 4071

<211> 601

<212> DNA

<213> Homo sapiens

<400> 4071

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 120
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 180
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 240
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 300
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 360
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 420
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 480
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 601

<210> 4072

<211> 175

<212> PRT

<213> Homo sapiens

<400> 4072

Met	Val	His	Arg	Arg	Gly	Trp	Pro	Ser	Cys	Leu	Ala	Arg	Gly	Gly	Arg
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Cys	Ala	Leu	Val	Pro	Arg	Leu	Val	Arg	Met	Lys	Val	Phe	His	Leu	Ser
			20					25					30		
Leu	Ser	Gln	Ser	Val	Val	Leu	Arg	His	His	Trp	Ile	Leu	Pro	Phe	Val
		35					40					45			
Gln	Ala	Leu	Lys	Ala	Arg	Met	Thr	Ser	Phe	His	Arg	Phe	Phe	Phe	Thr
	50					55					60				
Ala	Asn	Gln	Val	Lys	Ile	Tyr	Thr	Asn	Gln	Glu	Lys	Thr	Arg	Thr	Phe
65					70					75				80	
Ile	Gly	Leu	Glu	Val	Thr	Ser	Gly	His	Ala	Gln	Phe	Leu	Asp	Leu	Val
			85					90					95		
Ser	Glu	Val	Asp	Arg	Val	Met	Glu	Glu	Phe	Asn	Leu	Thr	Thr	Phe	Tyr
		100					105					110			
Gln	Asp	Pro	Ser	Phe	His	Leu	Ser	Leu	Ala	Trp	Cys	Val	Gly	Asp	Ala
	115					120					125				
Arg	Leu	Gln	Leu	Glu	Gly	Gln	Cys	Leu	Gln	Glu	Leu	Gln	Ala	Ile	Val
	130				135					140					
Asp	Gly	Phe	Glu	Asp	Ala	Glu	Val	Leu	Leu	Arg	Val	His	Thr	Glu	Gln
145				150					155					160	
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<210> 4073

<211> 1864

<212> DNA

<213> Homo sapiens

<400> 4073

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<210> 4074

<211> 456

<212> PRT

<213> Homo sapiens

<400> 4074

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			20					25					30		
Asn	Pro	Val	Asp	Ala	Ile	Tyr	Gln	Pro	Ser	Pro	Leu	Glu	Pro	Val	Ile
		35					40					45			
Ser	Thr	Met	Pro	Ser	Gln	Thr	Val	Leu	Pro	Pro	Glu	Pro	Val	Gln	Leu
	50					55					60				
Cys	Lys	Ser	Glu	Gln	Arg	Pro	Ser	Ser	Leu	Pro	Val	Gly	Pro	Val	Leu
65					70					75					80
Ala	Thr	Leu	Gly	His	His	Gln	Thr	Pro	Thr	Pro	Asn	Ser	Thr	Gly	Ser
				85					90					95	
Gly	His	Ser	Pro	Pro	Ser	Ser	Ser	Leu	Thr	Ser	Pro	Ser	His	Val	Asn
			100					105					110		
Leu	Ser	Pro	Asn	Thr	Val	Pro	Glu	Phe	Ser	Tyr	Ser	Ser	Ser	Glu	Asp
		115					120					125			
Glu	Phe	Tyr	Asp	Ala	Asp	Glu	Phe	His	Gln	Ser	Gly	Ser	Ser	Pro	Lys
	130					135					140				
Arg	Leu	Ile	Asp	Ser	Ser	Gly	Ser	Ala	Ser	Val	Leu	Thr	His	Ser	Ser
145					150					155					160
Ser	Gly	Asn	Ser	Leu	Lys	Arg	Pro	Asp	Thr	Thr	Glu	Ser	Leu	Asn	Ser
				165					170					175	
Ser	Leu	Ser	Asn	Gly	Thr	Ser	Asp	Ala	Asp	Leu	Phe	Asp	Ser	His	Asp
			180					185						190	
Asp	Arg	Asp	Asp	Asp	Ala	Glu	Ala	Gly	Ser	Val	Glu	Glu	His	Lys	Ser
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Val	Ile	Met	His	Leu	Leu	Ser	Gln	Val	Arg	Leu	Gly	Met	Asp	Leu	Thr
	210					215					220				
Lys	Val	Val	Leu	Pro	Thr	Phe	Ile	Leu	Glu	Arg	Arg	Ser	Leu	Leu	Glu
225					230					235					240
Met	Tyr	Ala	Asp	Phe	Phe	Ala	His	Pro	Asp	Leu	Phe	Val	Ser	Ile	Ser
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Asp	Gln	Lys	Asp	Pro	Lys	Asp	Arg	Met	Val	Gln	Val	Val	Lys	Trp	Tyr

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<210> 4075
<211> 2492
<212> DNA
<213> Homo sapiens
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420
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480
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<210> 4076

<211> 410

<212> PRT

<213> Homo sapiens

<400> 4076

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Ala	Gly	Ile	His	Arg	Asn	Leu	Gly	Val	His	Ile	Ser	Arg	Val	Lys	Ser
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Thr	Phe	Arg	Arg	Pro	Gln	Ile	Asp	Pro	Ala	Val	Glu	Gly	Phe	Ile	Arg
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Asp	Lys	Tyr	Glu	Lys	Lys	Lys	Tyr	Met	Asp	Arg	Ser	Leu	Asp	Ile	Asn
			100					105					110		
Ala	Phe	Arg	Lys	Glu	Lys	Asp	Asp	Lys	Trp	Lys	Arg	Gly	Ser	Glu	Pro
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Val	Pro	Glu	Lys	Lys	Leu	Glu	Pro	Val	Val	Phe	Glu	Lys	Val	Lys	Met
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Pro	Gln	Lys	Lys	Glu	Asp	Pro	Gln	Leu	Pro	Arg	Lys	Ser	Ser	Pro	Lys
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Ser	Thr	Ala	Pro	Val	Met	Asp	Leu	Leu	Gly	Leu	Asp	Ala	Pro	Val	Ala
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Cys	Ser	Ile	Ala	Asn	Ser	Lys	Thr	Ser	Asn	Thr	Leu	Glu	Lys	Asp	Leu
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Asp	Leu	Leu	Ala	Ser	Val	Pro	Ser	Pro	Ser	Ser	Ser	Gly	Ser	Arg	Lys
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Val	Val	Gly	Ser	Met	Pro	Thr	Ala	Gly	Ser	Ala	Gly	Ser	Val	Pro	Glu
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Asn	Leu	Asn	Leu	Phe	Pro	Glu	Pro	Gly	Ser	Lys	Ser	Glu	Glu	Ile	Gly
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Lys	Lys	Gln	Leu	Ser	Lys	Asp	Ser	Ile	Leu	Ser	Leu	Tyr	Gly	Ser	Gln
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Thr	Pro	Gln	Met	Pro	Thr	Gln	Ala	Met	Phe	Met	Ala	Pro	Ala	Gln	Met
		260						265					270		
Ala	Tyr	Pro	Thr	Ala	Tyr	Pro	Ser	Phe	Pro	Gly	Val	Thr	Pro	Pro	Asn
	275						280					285			
Ser	Ile	Met	Gly	Ser	Met	Met	Pro	Pro	Pro	Val	Gly	Met	Val	Ala	Gln
	290					295					300				
Pro	Gly	Ala	Ser	Gly	Met	Val	Ala	Pro	Met	Ala	Met	Pro	Ala	Gly	Tyr

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Met Gly Gly Met Gln Ala Ser Met Met Gly Val Pro Asn Gly Met Met						
	325		330		335	
Thr Thr Gln Gln Ala Gly Tyr Met Ala Gly Met Ala Ala Met Pro Gln						
	340		345		350	
Thr Val Tyr Gly Val Gln Pro Ala Gln Gln Leu Gln Trp Asn Leu Thr						
	355		360		365	
Gln Met Thr Gln Gln Met Ala Gly Met Asn Phe Tyr Gly Ala Asn Gly						
	370		375		380	
Met Met Asn Tyr Gly Gln Ser Met Ser Gly Gly Asn Gly Gln Ala Ala						
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Asn Gln Thr Leu Ser Pro Gln Met Trp Lys						
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<210> 4077

<211> 684

<212> DNA

<213> Homo sapiens

<400> 4077

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<210> 4078

<211> 194

<212> PRT

<213> Homo sapiens

<400> 4078

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<211> 783
<212> DNA
<213> Homo sapiens
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240
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300
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420
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480
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540
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660
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 780
 nta
 783

<210> 4080
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 4080
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 35 40 45
 Glu Ala Leu His Ala Gln Pro Gly Glu Gln Gly Trp Met Gly Leu Lys
 50 55 60
 Arg Ala Gln Pro Ser Pro Glu Arg Thr Leu His Ser Asn Leu Pro Gln
 65 70 75 80
 Ser Trp Gly Lys His Glu Gly Cys Pro Ser Thr Glu Val Asn Pro Gly
 85 90 95
 His Ala Arg Thr Lys
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<210> 4081
 <211> 645
 <212> DNA
 <213> Homo sapiens

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 180
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 645

<210> 4082
<211> 215
<212> PRT
<213> Homo sapiens

<400> 4082
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20 25 30
Val Arg Pro Val Gln Asn Leu Ala Leu Gly Lys Glu Glu Leu Ile Gly
35 40 45
Thr Met Glu Gln Ile Phe Met Asn Val Ala Ile Phe Glu Asp Glu Val
50 55 60
Phe Ala Gly Val Thr Thr His Gln Glu Leu Phe Pro His Ser Leu Leu
65 70 75 80
Ser Val Ile Ala Asn Phe Ile Pro Phe Ser Asp His Asn Gln Ser Pro
85 90 95
Arg Asn Met Tyr Gln Cys Gln Met Gly Lys Gln Thr Met Gly Phe Pro
100 105 110
Leu Leu Thr Tyr Gln Asp Arg Ser Asp Asn Lys Leu Tyr Arg Leu Gln
115 120 125
Thr Pro Gln Ser Pro Leu Val Arg Pro Ser Met Tyr Asp Tyr Tyr Asp
130 135 140
Met Asp Asn Tyr Pro Ile Gly Thr Asn Ala Ile Val Ala Val Ile Ser
145 150 155 160
Tyr Thr Gly Tyr Asp Met Glu Asp Ala Met Ile Val Asn Lys Ala Ser
165 170 175
Trp Glu Arg Gly Phe Ala His Gly Ser Val Tyr Lys Ser Glu Phe Ile
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Asp Leu Ser Glu Lys Ile Lys Gln Gly Asp Ser Ser Leu Val Phe Gly
195 200 205
Ile Lys Pro Gly Asp Pro Arg
210 215

<210> 4083
<211> 2983
<212> DNA
<213> Homo sapiens

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 2880
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<211> 362

<212> PRT

<213> Homo sapiens

<400> 4084

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			20					25					30		
Val	Tyr	Gly	Leu	Asn	Phe	Ala	Ser	Lys	Glu	Glu	Ala	Thr	Thr	Phe	Ser
		35					40					45			
Asn	Ala	Met	Leu	Phe	Ala	Leu	Asn	Ile	Met	Asn	Ser	Gln	Glu	Gly	Gly
		50				55					60				
Pro	Ser	Ser	Gln	Arg	Gln	Val	Gln	Asn	Gly	Pro	Ser	Pro	Asp	Glu	Met
65					70					75				80	
Asp	Ile	Gln	Arg	Arg	Gln	Val	Met	Glu	Gln	His	Gln	Gln	Gln	Arg	Gln
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<211> 2673
<212> DNA
<213> Homo sapiens
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360
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420
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<210> 4086

<211> 789

<212> PRT

<213> Homo sapiens

<400> 4086

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			20					25					30		
Phe	Leu	Leu	Val	Phe	Ala	Ile	Ala	Ala	Ala	Ala	Tyr	Val	Trp	Ile	Glu
			35				40					45			
Gly	Thr	Lys	Asp	Pro	Ser	Arg	Asn	Arg	Tyr	Lys	Leu	Phe	Leu	Glu	Cys
			50				55				60				
Thr	Leu	Ile	Leu	Thr	Ser	Val	Val	Pro	Pro	Glu	Leu	Pro	Ile	Glu	Leu
65					70					75				80	
Ser	Leu	Ala	Val	Asn	Thr	Ser	Leu	Ile	Ala	Leu	Ala	Lys	Leu	Tyr	Met
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Tyr	Cys	Thr	Glu	Pro	Phe	Arg	Ile	Pro	Phe	Ala	Gly	Lys	Val	Glu	Val
			100					105					110		
Cys	Cys	Phe	Asp	Lys	Thr	Gly	Thr	Leu	Thr	Ser	Asp	Ser	Leu	Val	Val
			115				120				125				
Arg	Gly	Val	Ala	Gly	Leu	Arg	Asp	Gly	Lys	Glu	Val	Thr	Pro	Val	Ser
			130				135				140				
Ser	Ile	Pro	Val	Glu	Thr	His	Arg	Ala	Leu	Ala	Ser	Cys	His	Ser	Leu
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Met	Gln	Leu	Asp	Asp	Gly	Thr	Leu	Val	Gly	Asp	Pro	Leu	Glu	Lys	Ala
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Met	Leu	Thr	Ala	Val	Asp	Trp	Thr	Leu	Thr	Lys	Asp	Glu	Lys	Val	Phe
			180					185					190		
Pro	Arg	Ser	Ile	Lys	Thr	Gln	Gly	Leu	Lys	Ile	His	Gln	Arg	Phe	His

3274

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 Thr Val Met Leu Gln Phe Phe Val His Phe Leu Ser Leu Val Tyr Leu
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 Tyr Arg Glu Ala Gln Ala Arg Ser Pro Xaa Arg Xaa Gln Glu Gln Phe
 660 665 670
 Val Asp Leu Tyr Lys Glu Phe Glu Pro Ser Leu Val Asn Ser Thr Val
 675 680 685
 Tyr Ile Met Ala Met Ala Met Gln Met Ala Thr Phe Ala Ile Asn Tyr
 690 695 700
 Lys Gly Pro Pro Phe Met Glu Ser Leu Pro Glu Asn Lys Pro Leu Val
 705 710 715 720
 Trp Ser Leu Ala Val Ser Leu Leu Ala Ile Ile Gly Leu Leu Leu Gly
 725 730 735
 Ser Ser Pro Asp Phe Asn Ser Gln Phe Gly Leu Val Asp Ile Pro Val
 740 745 750
 Glu Phe Lys Leu Val Ile Ala Gln Val Leu Leu Leu Asp Phe Cys Leu
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<210> 4087

<211> 959

<212> DNA

<213> Homo sapiens

<400> 4087

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 180
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 420
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 480
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 540
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 660
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 720
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 780

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 840
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<210> 4088

<211> 319

<212> PRT

<213> Homo sapiens

<400> 4088

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Gln	Trp	Ala	Glu	Gln	Thr	Arg	Arg	Leu	Gln	Arg	Leu	Asp	Val	Ser	Leu
			20					25					30		
Ala	Val	Ala	Arg	Val	Arg	Ser	Ala	Gly	Pro	Ser	Cys	Gln	Asn	Lys	Gly
		35					40					45			
Asp	Leu	Val	Met	Glu	Ala	Leu	Leu	Glu	Gly	Ile	Gln	Asn	Arg	Gly	His
	50					55					60				
Gly	Gly	Gly	Phe	Leu	Thr	Ser	Cys	Glu	Ala	Glu	Leu	Gln	Glu	Leu	Met
65				70						75				80	
Lys	Gln	Ile	Asp	Ile	Met	Val	Ala	His	Lys	Lys	Ser	Glu	Trp	Glu	Gly
			85						90					95	
Arg	Thr	His	Ala	Leu	Glu	Thr	Cys	Leu	Lys	Ile	Arg	Glu	Gln	Glu	Leu
			100					105					110		
Lys	Ser	Leu	Arg	Ser	Gln	Leu	Asp	Val	Thr	His	Lys	Glu	Val	Gly	Met
		115					120					125			
Leu	His	Gln	Gln	Val	Glu	Glu	His	Glu	Lys	Ile	Lys	Gln	Glu	Met	Thr
	130					135					140				
Met	Glu	Tyr	Lys	Gln	Glu	Leu	Lys	Lys	Leu	His	Glu	Glu	Leu	Cys	Ile
145				150						155				160	
Leu	Lys	Arg	Ser	Tyr	Glu	Lys	Leu	Gln	Lys	Lys	Gln	Met	Arg	Glu	Phe
			165					170						175	
Arg	Gly	Asn	Thr	Lys	Asn	His	Arg	Glu	Asp	Arg	Ser	Glu	Ile	Glu	Arg
			180					185					190		
Leu	Thr	Ala	Lys	Ile	Glu	Glu	Phe	Arg	Gln	Lys	Ser	Leu	Asp	Trp	Glu
		195					200					205			
Lys	Gln	Arg	Leu	Ile	Tyr	Gln	Gln	Gln	Val	Ser	Ser	Leu	Glu	Ala	Gln
	210					215						220			
Arg	Lys	Ala	Leu	Ala	Glu	Gln	Ser	Glu	Ile	Ile	Gln	Ala	Gln	Leu	Val
225				230						235				240	
Asn	Arg	Lys	Gln	Lys	Leu	Glu	Ser	Val	Glu	Leu	Ser	Ser	Gln	Ser	Glu
			245						250					255	
Ile	Gln	His	Leu	Ser	Ser	Lys	Leu	Glu	Arg	Ala	Asn	Asp	Thr	Ile	Cys
		260						265					270		
Ala	Asn	Glu	Leu	Glu	Ile	Glu	Arg	Leu	Thr	Met	Arg	Val	Asn	Asp	Leu
		275					280					285			
Val	Gly	Thr	Ser	Met	Thr	Val	Leu	Gln	Glu	Gln	Gln	Gln	Lys	Glu	Glu
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<210> 4089
<211> 511
<212> DNA
<213> Homo sapiens

<400> 4089
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120
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180
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240
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360
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511

<210> 4090
<211> 109
<212> PRT
<213> Homo sapiens

<400> 4090
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Lys Asn Tyr Ala Leu Gln Glu His Val Ser Phe Val Ile Phe Leu Ser
35 40 45
Ser Asn Phe Phe Trp Arg Asp Glu Ser Phe Asp Leu Thr Leu Arg Ile
50 55 60
Gly Leu Lys Pro Phe Glu Arg Thr Lys Glu Ile Glu Ser Ala Phe Leu
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Ser Pro Cys Ser Glu Asp Pro Ser His Leu Val Thr Ala Pro Trp Ala
85 90 95
Val Tyr Phe His Cys Leu Trp Lys Ile Glu Tyr Thr Cys
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<210> 4091
<211> 1526
<212> DNA
<213> Homo sapiens

<400> 4091
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180
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360
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420
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480
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540
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600
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1526

<210> 4092

<211> 146

<212> PRT

<213> Homo sapiens

<400> 4092

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          20          25          30
Arg Gly Gly Val Arg Gly Ala Arg Gln Gly Arg Ala Pro Gly Ser Ser
          35          40          45
Ile Trp Arg Lys Glu Pro Arg Met Val Cys Thr Arg Lys Thr Lys Thr
 50          55          60
Leu Val Ser Thr Cys Val Ile Leu Ser Gly Met Thr Asn Ile Ile Cys
65          70          75          80
Leu Leu Tyr Val Gly Trp Val Thr Asn Tyr Ile Ala Ser Val Tyr Val
          85          90          95
Arg Gly Gln Glu Pro Ala Pro Asp Lys Lys Leu Glu Glu Asp Lys Gly
          100          105          110
Asp Thr Leu Lys Ile Ile Glu Arg Leu Asp His Leu Glu Asn Val Ile
          115          120          125
Lys Gln His Ile Gln Gly Tyr Arg Arg Asn Phe Ser Leu Leu Asn Val
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Ser Asn
145

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<210> 4093

<211> 1519

<212> DNA

<213> Homo sapiens

<400> 4093

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120
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660
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720

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 1020
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 1080
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<210> 4094

<211> 391

<212> PRT

<213> Homo sapiens

<400> 4094

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			20					25					30		
Glu	Arg	Phe	Ala	Ile	Val	Leu	Asn	Ala	Met	Asn	Leu	Pro	Pro	Asp	Lys
	35						40					45			
Ala	Arg	Leu	Leu	Arg	Gln	Tyr	Asp	Asn	Glu	Lys	Lys	Trp	Glu	Leu	Ile
	50					55					60				
Cys	Asp	Gln	Glu	Arg	Phe	Gln	Val	Lys	Asn	Pro	Pro	His	Thr	Tyr	Ile
65				70					75					80	
Gln	Lys	Leu	Lys	Gly	Tyr	Leu	Asp	Pro	Ala	Val	Thr	Arg	Lys	Lys	Phe
			85					90					95		
Arg	Arg	Arg	Val	Gln	Glu	Ser	Thr	Gln	Val	Leu	Arg	Glu	Leu	Glu	Ile
			100					105					110		
Ser	Leu	Arg	Thr	Asn	His	Ile	Gly	Trp	Val	Arg	Glu	Phe	Leu	Asn	Glu
	115					120					125				
Glu	Asn	Lys	Gly	Leu	Asp	Val	Leu	Val	Glu	Tyr	Leu	Ser	Phe	Ala	Gln
	130					135					140				
Tyr	Ala	Val	Thr	Phe	Asp	Phe	Glu	Ser	Val	Glu	Ser	Thr	Val	Glu	Ser

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Ser	Val	Asp	Lys	Ser	Lys	Pro	Trp	Ser	Arg	Ser	Ile	Glu	Asp	Leu	His
				165					170					175	
Arg	Gly	Ser	Asn	Leu	Pro	Ser	Pro	Val	Gly	Asn	Ser	Val	Ser	Arg	Ser
			180						185					190	
Gly	Arg	His	Ser	Ala	Leu	Arg	Tyr	Asn	Thr	Leu	Pro	Ser	Arg	Arg	Thr
		195					200					205			
Leu	Lys	Asn	Ser	Arg	Leu	Val	Ser	Lys	Lys	Asp	Asp	Val	His	Val	Cys
	210					215					220				
Ile	Met	Cys	Leu	Arg	Ala	Ile	Met	Asn	Tyr	Gln	Tyr	Gly	Phe	Asn	Met
225					230					235					240
Val	Met	Ser	His	Pro	His	Ala	Val	Asn	Glu	Ile	Ala	Leu	Ser	Leu	Asn
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Asn	Lys	Asn	Pro	Arg	Thr	Lys	Ala	Leu	Val	Leu	Glu	Leu	Leu	Ala	Ala
			260					265					270		
Val	Cys	Leu	Val	Arg	Gly	Gly	His	Glu	Ile	Ile	Leu	Ser	Ala	Phe	Asp
		275					280						285		
Asn	Phe	Lys	Glu	Val	Cys	Gly	Glu	Lys	Gln	Arg	Phe	Glu	Lys	Leu	Met
	290					295					300				
Glu	His	Phe	Arg	Asn	Glu	Asp	Asn	Asn	Ile	Asp	Phe	Met	Val	Ala	Ser
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Met	Gln	Phe	Ile	Asn	Ile	Val	Val	His	Ser	Val	Glu	Asp	Met	Asn	Phe
				325					330					335	
Arg	Val	His	Leu	Gln	Tyr	Glu	Phe	Thr	Lys	Leu	Gly	Leu	Asp	Glu	Tyr
			340					345					350		
Leu	Asp	Lys	Leu	Lys	His	Thr	Glu	Ser	Asp	Lys	Leu	Gln	Val	Gln	Ile
		355					360					365			
Gln	Ala	Tyr	Leu	Asp	Asn	Val	Phe	Asp	Val	Gly	Ala	Leu	Leu	Glu	Asp
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<210> 4095

<211> 253

<212> DNA

<213> Homo sapiens

<400> 4095

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253

<210> 4096

<211> 83

<212> PRT

<213> Homo sapiens

<400> 4096

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           20           25           30
Gln Val Arg Lys Leu Arg Leu Lys Arg Asp Gln Val Ala Ser Pro Ala
           35           40           45
Lys Ser Glu Ala Ser Gly Gly Ala Cys Ala Arg Val Ser Gly Ser Val
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<210> 4097

<211> 1385

<212> DNA

<213> Homo sapiens

<400> 4097

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<211> 258

<212> PRT

<213> Homo sapiens

<400> 4098

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			20					25					30		
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Glu	Arg	Met	Leu	Gly	Ala	Val	Gln	Val	Lys	Arg	Arg	Thr	Lys	Lys	Lys
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Ile	Pro	Phe	Leu	Ala	Thr	Gly	Gly	Gln	Gly	Glu	Tyr	Leu	Thr	Tyr	Ile
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Val	Lys	Gln	Phe	Glu	Gly	Ser	Thr	Ser	Phe	Val	Arg	Arg	Ser	Gln	Trp
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	130					135					140				
Ser	Ala	Glu	Phe	Asp	Leu	Leu	Phe	Glu	Asn	Ala	Phe	Asp	Gln	Trp	Val
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Ala	Ser	Thr	Ala	Ser	Glu	Lys	Cys	Thr	Phe	Phe	Gln	Ile	Leu	His	His
			165						170					175	
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		180						185					190		
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		195					200					205			
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<400> 4100
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 35 40 45
 Leu Arg Lys Glu Lys Val His Val Ser Lys Ser Gly Gly Ser Gln Ala
 50 55 60
 Gln Ala Thr Gly Val Ile Ser Cys Val Ala Ser Arg Ile Cys Leu Ile
 65 70 75 80
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<210> 4101
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 <212> DNA
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<400> 4101

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<212> PRT

<213> Homo sapiens

<400> 4102

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			20					25					30		
Asp	Asp	Arg	Lys	Asp	Thr	Cys	Ser	Pro	Pro	Phe	Pro	Gly	Pro	Arg	His
			35				40					45			
Val	Gln	Asn	Ser	Ser	Trp	Gly	Leu	Gln	Leu	Leu	Gly	Glu	Thr	Gln	Gly
	50					55					60				
Leu	Leu	Leu	His	Ser	Leu	Gln	Gly	Leu	Ser	Arg	Gln	Arg	Pro	Trp	Gly
65					70				75					80	
Gly	Glu	Ala	Pro	Ala	Trp	Ser	Leu	Pro	Ala	Pro	Pro	Met	Gln	Ala	Val
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<210> 4103

<211> 3040

<212> DNA

<213> Homo sapiens

<400> 4103

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<211> 978

<212> PRT

<213> Homo sapiens

<400> 4104

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			20					25					30		
Gln	Glu	Ser	Val	Asp	Thr	Gly	Glu	Glu	Glu	Glu	Gly	Gly	Asp	Glu	Ser
		35					40					45			
Asp	Leu	Ser	Ser	Glu	Ser	Ser	Ile	Lys	Lys	Lys	Ser	Gln	Glu	Glu	Arg
	50					55					60				
Lys	Asp	Arg	Gln	Ser	Leu	Asp	Lys	Pro	Ala	Arg	Lys	Arg	Arg	Arg	Arg

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Ser	Arg	Lys	Lys	Pro	Ser	Gly	Ala	Leu	Gly	Ser	Glu	Ser	Tyr	Lys	Ser
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Ser	Ala	Gly	Ser	Ala	Glu	Gln	Thr	Ala	Pro	Gly	Asp	Ser	Thr	Gly	Tyr
			100					105					110		
Met	Glu	Val	Ser	Leu	Asp	Ser	Leu	Asp	Leu	Arg	Val	Lys	Gly	Ile	Leu
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Ser	Ser	Gln	Ala	Glu	Gly	Leu	Ala	Asn	Gly	Pro	Asp	Val	Leu	Glu	Thr
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Asp	Gly	Leu	Gln	Glu	Val	Pro	Leu	Cys	Ser	Cys	Arg	Met	Glu	Thr	Pro
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Lys	Ser	Arg	Glu	Ile	Thr	Thr	Leu	Ala	Asn	Asn	Gln	Cys	Met	Ala	Thr
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Glu	Ser	Val	Asp	His	Glu	Leu	Gly	Arg	Cys	Thr	Asn	Ser	Val	Val	Lys
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Tyr	Glu	Leu	Met	Arg	Pro	Ser	Asn	Lys	Ala	Pro	Leu	Leu	Val	Leu	Cys
	195						200					205			
Glu	Asp	His	Arg	Gly	Arg	Met	Val	Lys	His	Gln	Cys	Cys	Pro	Gly	Cys
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Gly	Tyr	Phe	Cys	Thr	Ala	Gly	Asn	Phe	Met	Glu	Cys	Gln	Pro	Glu	Ser
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Ser	Ile	Ser	His	Arg	Phe	His	Lys	Asp	Cys	Ala	Ser	Arg	Val	Asn	Asn
			245					250						255	
Ala	Ser	Tyr	Cys	Pro	His	Cys	Gly	Glu	Glu	Ser	Ser	Lys	Ala	Lys	Glu
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Val	Thr	Ile	Ala	Lys	Ala	Asp	Thr	Thr	Ser	Thr	Val	Thr	Pro	Val	Pro
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Val	Gln	Pro	Pro	Thr	Xaa	Pro	Glu	Gly	Phe	Asp	Pro	Thr	Gly	Pro	Ala
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Ala	Lys	Lys	Gly	His	Tyr	Glu	Val	Val	Gln	Tyr	Leu	Leu	Ser	Asn	Gly
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Arg	Met	Asp	Val	Asn	Cys	Gln	Asp	Asp	Gly	Gly	Trp	Thr	Pro	Met	Ile

3289

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 <212> DNA
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<210> 4106
 <211> 186
 <212> PRT
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<400> 4106
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 Trp Glu Val Arg Tyr Glu Pro Asp Ser Lys Ala Phe Gly Val Gly Val

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	85	90
His Ala Asn Lys Val Lys Val Leu Asp Ala Pro Val Pro Asp Cys Leu		95
	100	105
Gly Val His Cys Asp Phe His Gln Gly Leu Leu Ser Phe Tyr Asn Ala		110
	115	120
Arg Thr Lys Gln Val Leu His Thr Phe Lys Thr Arg Phe Thr Gln Pro		125
	130	135
Leu Leu Pro Ala Phe Thr Val Trp Cys Gly Ser Phe Gln Val Thr Thr		140
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<210> 4107

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<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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Ile	Gln	Val	His	Val	Thr	Ala	Cys	Ile	Leu	Ser	Val	Cys	Gly	Trp	Ala
	130					135						140			
Cys	Ser	Ser	Ser	Leu	Glu	Ser	Met	Gln	Leu	Ser	Leu	Ile	Ala	Cys	Ser
145				150					155					160	
Gln	Cys	Met	Arg	Lys	Val	Gly	Leu	Trp	Gly	Phe	Gln	Gln	Ile	Glu	Ser
			165					170						175	
Ser	Met	Thr	Asp	Leu	Asp	Ala	Ser	Phe	Gly	Leu	Thr	Ser	Ser	Pro	Ile
		180						185					190		
Pro	Gly	Leu	Glu	Gly	Arg	Pro	Glu	Arg	Leu	Pro	Leu	Val	Pro	Glu	Ser
	195					200						205			
Pro	Arg	Arg	Met	Met	Thr	Arg	Ser	Gln	Asp	Ala	Thr	Phe	Ser	Pro	Gly

210	215	220
Ser Glu Gln Ala Glu Lys	Ser Pro Gly Pro Ile	Val Ser Arg Thr Arg
225	230	235
Ser Trp Asp Ser Ser Ser	Pro Val Asp Arg Pro	Glu Pro Glu Ala Ala
245	250	255
Ser Pro Thr Thr Arg Thr	Arg Pro Val Thr Arg	Ser Met Gly Thr Gly
260	265	270
Asp Thr Pro Gly Leu Glu	Val Pro Ser Ser Xaa	Ser Ala Glu Ser Gln
275	280	285
Ala Ser Ser Leu Cys Ser	Ser Ser Ser Ser Asp	Thr Ser Ser Arg Ser
290	295	300
Phe Phe Asp Pro Thr Ser	Gln His Arg Asp Trp	Cys Pro Trp Val Asn
305	310	315
Ile Thr Leu Gly Lys Glu	Ser Arg Glu Asn Gly	Gly Thr Glu Pro Asp
325	330	335
Ala Ser Ala Pro Ala Glu	Pro Gly Trp Lys Ala	Val Leu Thr Ile Leu
340	345	350
Leu Ala His Lys Gln Ser	Ser Gln Pro Ala Glu	Thr Asp Ser Met Ser
355	360	365
Leu Ser Glu Lys Ser Arg	Lys Val Phe Arg Ile	Phe Arg Gln Trp Glu
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Ser Leu Cys Ser Cys		
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<210> 4115

<211> 1056

<212> DNA

<213> Homo sapiens

<400> 4115

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 180
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 360
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 420
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 720

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 780
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 840
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 900
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 960
 ccttttatca ttattcacac tcctctgccc tcgatttgca tgaagttgaa aattgttgcg
 1020
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 1056

<210> 4116
 <211> 151
 <212> PRT
 <213> Homo sapiens

<400> 4116
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 Asn His Ser Asp Ser Leu Ser Arg Ser Asp Arg Ile Asp Ala Val Thr
 35 40 45
 Pro Thr Leu Gly Ser Ser Asn Asn Gln Leu Asn Ser Ser Leu Leu Gln
 50 55 60
 Val Tyr Ile Pro Asp Tyr Ser Val Arg Ala Leu Ser Asp Leu Gln Phe
 65 70 75 80
 Val Lys Ile Ser Arg Gln Gln Tyr Gln Asn Ala Leu Met Ala Ser Arg
 85 90 95
 Met Asp Lys Thr Pro Gln Ser Ser Asp Ser Glu Asn Thr Lys Ile Glu
 100 105 110
 Leu Thr Leu Thr Glu Leu His Asp Gly Leu Pro Asp Glu Thr Ala Asn
 115 120 125
 Leu Leu Asn Glu Gln Asn Cys Val Thr His Ser Lys Ala Asn His Ser
 130 135 140
 Leu His Asn Glu Gly Ala Ile
 145 150

<210> 4117
 <211> 973
 <212> DNA
 <213> Homo sapiens

<400> 4117
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 120
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 180
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 240

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 360
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 420
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 480
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 660
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 720
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 780
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 840
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 960
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 973

<210> 4118

<211> 128

<212> PRT

<213> Homo sapiens

<400> 4118

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His	Leu	Gly	Pro	Gln	Ala	Gln	Pro	Ala	Val	Gln	Ala	His	Asp	Trp	Pro
		20						25					30		
Gly	Cys	Gly	Arg	Trp	Pro	Gln	Pro	Pro	Gly	Gly	Ile	Leu	Glu	Trp	Glu
		35					40					45			
Arg	Cys	Val	Gly	Cys	Pro	Arg	Pro	Ala	Arg	Pro	Ala	Ser	Pro	Ser	Pro
		50				55					60				
Gly	Glu	Ala	Thr	Pro	Pro	Pro	Ser	Ser	Gly	Ile	Ser	Ala	Val	Lys	Pro
65				70					75					80	
Pro	Leu	Arg	Ser	Pro	Arg	Thr	Leu	Pro	Leu	Glu	Leu	Gly	Thr	Gly	Gly
				85				90					95		
Cys	Val	Cys	Ala	Gly	Leu	Gly	Pro	Asn	Thr	Pro	Gly	Cys	Gln	Leu	His
			100					105					110		
Pro	Pro	Ala	Val	Leu	Cys	Pro	Gln	Gly	Leu	Gly	Arg	His	Gln	Arg	Leu
		115					120						125		

<210> 4119

<211> 649

<212> DNA

<213> Homo sapiens

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 120
 accaattttc tgaactacaa aaatgatcga accataaaaa tcaggaacac ctctggttcc
 180
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 240
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 360
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 540
 agggcagctt ccgtagctgt aggtctctct ctggttactg cccacagcct tcactaattg
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 649

<210> 4120
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 4120
 His Leu Phe Leu Gln Ser Ser Gly Leu Ser Thr Trp Ile Gly Asn Gln
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 Met Leu Ser Leu Ser Ser Leu Pro Pro Trp Ala Val Thr Leu Leu Ala
 20 25 30
 Cys Ile Leu Val Ser Ile Val Thr Glu Phe Val Ser Asn Pro Ala Thr
 35 40 45
 Ile Thr Ile Phe Leu Pro Ile Leu Cys Ser Leu Val Ser Asn Ala Glu
 50 55 60
 Leu Pro Asp Ile Gln Thr Gly Cys Pro Arg Gly Leu Glu Trp Gln Ala
 65 70 75 80
 Trp Leu Arg Ala Ala Ser Val Ala Val Gly Ser Pro Leu Val Thr Ala
 85 90 95
 His Ser Leu His
 100

<210> 4121
 <211> 2490
 <212> DNA
 <213> Homo sapiens

<400> 4121
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120
atccaggcaa tttttacca gaaaagcaag ccggggcctg acccgttgga cacgagacgc
180
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300
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360
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420
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480
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540
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780
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1020
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 2340
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<210> 4122

<211> 494

<212> PRT

<213> Homo sapiens

<400> 4122

Arg	Ala	Arg	Gly	Cys	Ala	Gly	Pro	Cys	Gly	Arg	Ala	Val	Phe	Leu	Ala
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Phe	Gly	Leu	Gly	Leu	Gly	Leu	Ile	Glu	Glu	Lys	Gln	Ala	Glu	Ser	Arg
		20						25					30		
Arg	Ala	Val	Ser	Ala	Cys	Gln	Glu	Ile	Gln	Ala	Ile	Phe	Thr	Gln	Lys
		35				40						45			
Ser	Lys	Pro	Gly	Pro	Asp	Pro	Leu	Asp	Thr	Arg	Arg	Leu	Gln	Gly	Phe
	50					55					60				
Arg	Leu	Glu	Glu	Tyr	Leu	Ile	Gly	Gln	Ser	Ile	Gly	Lys	Gly	Cys	Ser
65				70					75					80	
Ala	Ala	Val	Tyr	Glu	Ala	Thr	Met	Pro	Thr	Leu	Pro	Gln	Asn	Leu	Glu
			85					90					95		
Val	Thr	Lys	Ser	Thr	Gly	Leu	Leu	Pro	Gly	Arg	Gly	Pro	Gly	Thr	Ser
		100						105					110		
Ala	Pro	Gly	Glu	Gly	Gln	Glu	Arg	Ala	Pro	Gly	Ala	Pro	Ala	Phe	Pro
		115					120					125			
Leu	Ala	Ile	Lys	Met	Met	Trp	Asn	Ile	Ser	Ala	Gly	Ser	Ser	Ser	Glu
	130					135					140				
Ala	Ile	Leu	Asn	Thr	Met	Ser	Gln	Glu	Leu	Val	Pro	Ala	Ser	Arg	Val

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145          150          155          160
Ala Leu Ala Gly Glu Tyr Gly Ala Val Thr Tyr Arg Lys Ser Lys Arg
          165          170          175
Gly Pro Lys Gln Leu Ala Pro His Pro Asn Ile Ile Arg Val Leu Arg
          180          185          190
Ala Phe Thr Ser Ser Val Pro Leu Leu Pro Gly Ala Leu Val Asp Tyr
          195          200          205
Pro Asp Val Leu Pro Ser Arg Leu His Pro Glu Gly Leu Gly His Gly
          210          215          220
Arg Thr Leu Phe Leu Val Met Lys Asn Tyr Pro Cys Thr Leu Arg Gln
225          230          235          240
Tyr Leu Cys Val Asn Thr Pro Ser Pro Arg Leu Ala Ala Met Met Leu
          245          250          255
Leu Gln Leu Leu Glu Gly Val Asp His Leu Val Gln Gln Gly Ile Ala
          260          265          270
His Arg Asp Leu Lys Ser Asp Asn Ile Leu Val Glu Leu Asp Pro Asp
          275          280          285
Gly Cys Pro Trp Leu Val Ile Ala Asp Phe Gly Cys Cys Leu Ala Asp
          290          295          300
Glu Ser Ile Gly Leu Gln Leu Pro Phe Ser Ser Trp Tyr Val Asp Arg
305          310          315          320
Gly Gly Asn Gly Cys Leu Met Ala Pro Glu Val Ser Thr Ala Arg Pro
          325          330          335
Gly Pro Arg Ala Val Ile Asp Tyr Ser Lys Ala Asp Ala Trp Ala Val
          340          345          350
Gly Ala Ile Ala Tyr Glu Ile Phe Gly Leu Val Asn Pro Phe Tyr Gly
          355          360          365
Gln Gly Lys Ala His Leu Glu Ser Arg Ser Tyr Gln Glu Ala Gln Leu
          370          375          380
Pro Ala Leu Pro Glu Ser Val Pro Pro Asp Val Arg Gln Leu Val Arg
385          390          395          400
Ala Leu Leu Gln Arg Glu Ala Ser Lys Arg Pro Ser Ala Arg Val Ala
          405          410          415
Ala Asn Val Leu His Leu Ser Leu Trp Gly Glu His Ile Leu Ala Leu
          420          425          430
Lys Asn Leu Lys Leu Asp Lys Met Val Gly Trp Leu Leu Gln Gln Ser
          435          440          445
Ala Ala Thr Leu Leu Ala Asn Arg Leu Thr Glu Lys Cys Cys Val Glu
          450          455          460
Thr Lys Met Lys Met Leu Phe Leu Ala Asn Leu Glu Cys Glu Thr Leu
465          470          475          480
Cys Gln Ala Ala Leu Leu Leu Cys Ser Trp Arg Ala Ala Leu
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<210> 4123

<211> 1095

<212> DNA

<213> Homo sapiens

<400> 4123

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120

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 180
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 240
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<210> 4124

<211> 155

<212> PRT

<213> Homo sapiens

<400> 4124

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Glu	Glu	Leu	Leu	Ser	Leu	Arg	Phe	Pro	Leu	His	Arg	Ala	Cys	Arg	Asp
				20				25					30		
Gly	Asp	Leu	Ala	Thr	Leu	Cys	Ser	Leu	Leu	Gln	Gln	Thr	Pro	His	Ala
				35				40					45		
His	Leu	Ala	Ser	Glu	Asp	Ser	Phe	Tyr	Gly	Trp	Thr	Pro	Val	His	Trp
				50				55				60			
Ala	Ala	His	Phe	Gly	Lys	Leu	Glu	Cys	Leu	Val	Gln	Leu	Val	Arg	Ala
				65				70				75			80
Gly	Ala	Thr	Leu	Asn	Val	Ser	Thr	Thr	Arg	Tyr	Ala	Gln	Thr	Pro	Ala
				85					90					95	
His	Ile	Ala	Ala	Phe	Gly	Gly	His	Pro	Gln	Cys	Leu	Val	Trp	Leu	Ile

	100		105		110										
Gln	Ala	Gly	Ala	Asn	Ile	Asn	Lys	Pro	Asp	Cys	Glu	Gly	Glu	Thr	Pro
	115		120		125										
Ile	His	Lys	Ala	Ala	Arg	Ser	Gly	Ser	Leu	Glu	Cys	Ile	Ser	Ala	Leu
	130		135		140										
Val	Ala	Asn	Gly	Ala	His	Val	Asp	Ser	Gln	His					
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<210> 4125

<211> 4711

<212> DNA

<213> Homo sapiens

<400> 4125

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<213> Homo sapiens

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 Val Val Asp Gln Gly Ala Gly Ala Ser Arg Gly Gly Asn Thr Arg Lys
 35 40 45
 Ser Leu Glu Asp Asn Gly Ser Thr Arg Val Thr Pro Ser Val Gln Pro
 50 55 60
 His Leu Gln Pro Ile Arg Asn Met Ser Val Ser Arg Thr Met Glu Asp
 65 70 75 80
 Ser Cys Glu Leu Asp Leu Val Tyr Val Thr Glu Arg Ile Ile Ala Val
 85 90 95
 Ser Phe Pro Ser Thr Ala Asn Glu Glu Asn Phe Arg Ser Asn Leu Arg
 100 105 110
 Glu Val Ala Gln Met Leu Lys Ser Lys His Gly Gly Asn Tyr Leu Leu
 115 120 125
 Phe Asn Leu Ser Glu Arg Arg Pro Asp Ile Thr Lys Leu His Ala Lys
 130 135 140
 Val Leu Glu Phe Gly Trp Pro Asp Leu His Thr Pro Ala Leu Glu Lys
 145 150 155 160
 Ile Cys Ser Ile Cys Lys Ala Met Asp Thr Trp Leu Asn Ala Asp Pro
 165 170 175
 His Asn Val Val Val Leu His Asn Lys Gly Asn Arg Gly Arg Ile Gly
 180 185 190
 Val Val Ile Ala Ala Tyr Met His Tyr Ser Asn Ile Ser Ala Ser Ala
 195 200 205
 Asp Gln Ala Leu Asp Arg Phe Ala Met Lys Arg Phe Tyr Glu Asp Lys
 210 215 220
 Ile Val Pro Ile Gly Gln Pro Ser Gln Arg Arg Tyr Val His Tyr Phe
 225 230 235 240
 Ser Gly Leu Leu Ser Gly Ser Ile Lys Met Asn Asn Lys Pro Leu Phe
 245 250 255
 Leu His His Val Ile Met His Gly Ile Pro Asn Phe Glu Ser Lys Gly
 260 265 270
 Gly Cys Arg Pro Phe Leu Arg Ile Tyr Gln Ala Met Gln Pro Val Tyr
 275 280 285
 Thr Ser Gly Ile Tyr Asn Ile Pro Gly Asp Ser Gln Thr Ser Val Cys
 290 295 300
 Ile Thr Ile Glu Pro Gly Leu Leu Leu Lys Gly Asp Ile Leu Leu Lys

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<210> 4131
<211> 608
<212> DNA
<213> Homo sapiens
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120
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180
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240
gtcccggaag acgtggaccc cagctatgaa gatctggagc ccgtctcgga ggatctggac
300
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360
gacctcgatc cagatgtgat tggccccgta cccctgattc tcgatacctaa cagcgacacc
420
ctcagccccg gcgatccaaa agtggacccc nnatctctc tggcctcact gcgagcccc
480
aggtcttggc caccagcccc gcggtgctcc ccgccccgc cagcccgccc cggcccttct
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600

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cgcacagc
608

<210> 4132
<211> 194
<212> PRT
<213> Homo sapiens

<400> 4132
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Leu Ala Pro Glu Ala Ala Gly Thr Ser Thr Pro Glu Met Arg Arg Ser
20 25 30
Val Leu Val Arg Asn Pro Gly His Lys Gly Leu Arg Pro Val Tyr Glu
35 40 45
Glu Leu Asp Ser Asp Ser Glu Asp Leu Asp Pro Asn Pro Glu Asp Leu
50 55 60
Asp Pro Val Ser Glu Asp Pro Glu Pro Asp Pro Glu Asp Leu Asn Thr
65 70 75 80
Val Pro Glu Asp Val Asp Pro Ser Tyr Glu Asp Leu Glu Pro Val Ser
85 90 95
Glu Asp Leu Asp Pro Asp Ala Glu Ala Pro Gly Ser Glu Pro Gln Asp
100 105 110
Pro Asp Pro Met Ser Ser Ser Phe Asp Leu Asp Pro Asp Val Ile Gly
115 120 125
Pro Val Pro Leu Ile Leu Asp Pro Asn Ser Asp Thr Leu Ser Pro Gly
130 135 140
Asp Pro Lys Val Asp Pro Xaa Ser Pro Leu Ala Ser Leu Arg Ala Pro
145 150 155 160
Arg Ser Trp Pro Pro Ala Pro Arg Cys Ser Pro Pro Pro Pro Ala Arg
165 170 175
Pro Gly Pro Ser Pro Ala Arg Ile Ala Ala Lys Pro Ser Ala Ala Ala
180 185 190
Pro Gly

<210> 4133
<211> 1646
<212> DNA
<213> Homo sapiens

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120
gaaatgggct gggagacaca gaaaatgggt gccacagtt cctgggatcc ctcttgggaat
180
cctgggtttc ctctctagga ccctgcaagg taccctacgt gcctcctgga accccccccc
240
accccggagg tccaaggaa ccagtttga gaaccaaggc ttaggcca ggacttcctt
300
gcacaagaag gtgcagatgt acagggatgg ttcagacagt ggctcaacc tcaatggctt
360

catcctcctc ctccagcagg ctgtaggaag catggctctg gcaaggccgc tgcagggggt
420
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480
catacttgta gctggtaccc ttggtatcca ggctgcccac gaaggcaaac atatccttcc
540
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600
aatatgggca ctggaacatt ttcttcatgg gctccgtcaa ggagaactgg ggctggcaag
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720
tctctgtgac cggaagctca gttttctgct ggatgaggct gaaaagtcct tccagattga
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960
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1440
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1560
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1620
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1646

<210> 4134

<211> 329

<212> PRT

<213> Homo sapiens

<400> 4134

Met	Glu	Val	Ala	Glu	Pro	Ser	Ser	Pro	Thr	Glu	Glu	Glu	Glu	Glu	Glu
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Glu	Glu	His	Ser	Ala	Glu	Pro	Arg	Pro	Arg	Thr	Arg	Ser	Asn	Pro	Glu

			20					25					30				
Gly	Ala	Glu	Asp	Arg	Ala	Val	Gly	Ala	Gln	Ala	Ser	Val	Gly	Ser	Arg		
		35						40					45				
Ser	Glu	Gly	Glu	Gly	Glu	Ala	Ala	Ser	Ala	Asp	Asp	Gly	Ser	Leu	Asn		
	50						55				60						
Thr	Ser	Gly	Ala	Gly	Pro	Lys	Ser	Trp	Gln	Val	Pro	Pro	Pro	Ala	Pro		
65					70					75					80		
Glu	Val	Gln	Ile	Arg	Thr	Pro	Arg	Val	Asn	Cys	Pro	Glu	Lys	Val	Ile		
			85						90					95			
Ile	Cys	Leu	Asp	Leu	Ser	Glu	Glu	Met	Ser	Leu	Pro	Lys	Leu	Glu	Ser		
			100					105					110				
Phe	Asn	Gly	Ser	Lys	Thr	Asn	Ala	Leu	Asn	Val	Ser	Gln	Lys	Met	Ile		
	115						120					125					
Glu	Met	Phe	Val	Arg	Thr	Lys	His	Lys	Ile	Asp	Lys	Ser	His	Glu	Phe		
	130					135						140					
Ala	Leu	Val	Val	Val	Asn	Asp	Asp	Thr	Ala	Trp	Leu	Ser	Gly	Leu	Thr		
145					150					155					160		
Ser	Asp	Pro	Arg	Glu	Leu	Cys	Ser	Cys	Leu	Tyr	Asp	Leu	Glu	Thr	Ala		
			165					170						175			
Ser	Cys	Ser	Thr	Phe	Asn	Leu	Glu	Gly	Leu	Phe	Ser	Leu	Ile	Gln	Gln		
		180						185					190				
Lys	Thr	Glu	Leu	Pro	Val	Thr	Glu	Asn	Val	Gln	Thr	Ile	Pro	Pro	Pro		
	195						200					205					
Tyr	Val	Val	Arg	Thr	Ile	Leu	Val	Tyr	Ser	Arg	Pro	Pro	Cys	Gln	Pro		
	210					215				220							
Gln	Phe	Ser	Leu	Thr	Glu	Pro	Met	Lys	Lys	Met	Phe	Gln	Cys	Pro	Tyr		
225					230					235					240		
Phe	Phe	Phe	Asp	Val	Val	Tyr	Ile	His	Asn	Gly	Thr	Glu	Glu	Lys	Glu		
			245					250						255			
Glu	Glu	Met	Ser	Trp	Lys	Asp	Met	Phe	Ala	Phe	Met	Gly	Ser	Leu	Asp		
		260						265					270				
Thr	Lys	Gly	Thr	Ser	Tyr	Lys	Tyr	Glu	Val	Ala	Leu	Ala	Gly	Pro	Ala		
	275						280						285				
Leu	Glu	Leu	His	Asn	Cys	Met	Ala	Lys	Leu	Leu	Ala	His	Pro	Leu	Gln		
	290					295						300					
Arg	Pro	Cys	Gln	Ser	His	Ala	Ser	Tyr	Ser	Leu	Leu	Glu	Glu	Glu	Asp		
305					310					315					320		
Glu	Ala	Ile	Glu	Val	Glu	Ala	Thr	Val									
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<210> 4135

<211> 388

<212> DNA

<213> Homo sapiens

<400> 4135

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120

tctgccattg ctggaaaaac tgaccacagg ccggattgca gagctgctat ctcccgacta
180

catggatctt gaggacccac gaccaatctt tgactggatg cagatcatcc gcaaacgggc
240

agtgggtctat gtcggcctgg acgctttatc tgatacagag gtagctgcag cgggtgggcaa
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388

<210> 4136
<211> 123
<212> PRT
<213> Homo sapiens

<400> 4136
Met Tyr Leu Thr Gln Gln Arg Ile Ser Asp Pro Val Met Glu Gly Leu
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Arg Ser Ala Val Arg Tyr Asp Lys Thr Tyr Phe Asp Lys Ile Val Ala
20 25 30
Ser Leu Leu Pro Leu Leu Glu Lys Leu Thr Thr Gly Arg Ile Ala Glu
35 40 45
Leu Leu Ser Pro Asp Tyr Met Asp Leu Glu Asp Pro Arg Pro Ile Phe
50 55 60
Asp Trp Met Gln Ile Ile Arg Lys Arg Ala Val Val Tyr Val Gly Leu
65 70 75 80
Asp Ala Leu Ser Asp Thr Glu Val Ala Ala Ala Val Gly Asn Ser Met
85 90 95
Phe Ser Asp Leu Val Ser Val Ala Gly His Ile Tyr Lys Phe Gly Ile
100 105 110
Asp Asp Gly Leu Pro Gly Ala Thr Gly Gly Lys
115 120

<210> 4137
<211> 2255
<212> DNA
<213> Homo sapiens

<400> 4137
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120
gagacttggg gcgggcgacg aggaccaggt tacggcctcc tcgccatgtc ctcggcctgc
180
gacgcgggcg accactaccc cctgcacctc ctagtctgga aaaacgacta ccggcagctc
240
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300
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360
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420
gatcctgaga tgggtgtacac agttctccaa catcgagact accacaacac atccatggcc
480
cttgagggag ttcctgagct gtcctcaaaa attctcgagg ctccggattt ctatgtgcag
540

atgaaatggg aattcaccag ctgggtgccc ttggtttcta gaatatgccc aaatgatgtc
600
tgtcgcatct ggaaaagtgg tgccaaactg cgcgtcgata tcacattgct gggatttgaa
660
aacatgagct ggataagagg gaggcgtagt tttatatatta agggagaaga caactgggcg
720
gagttaatgg aagtcaacca tgatgacaaa gtggtcacca ccgaacgctt cgacctttcc
780
caagaaatgg agcgccctcac tctggacttg atgaagccaa aaagcaggga agttgagcgg
840
cggtcacaaa gccctgtcat taacaccagc ctcgatacta aaaatattgc ttttgaaaga
900
actaaatccg gattctgggg ctggaggaca gataaagcag aagttgttaa tggttacgaa
960
gcaaaggttt acacagtaaa caatgtgaat gtgatcacca aaatacgcac agaacatctg
1020
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1140
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1200
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1260
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1320
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1560
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1680
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1740
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1800
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1860
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1980
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2100
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2160

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 2220
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 2255

<210> 4138

<211> 353

<212> PRT

<213> Homo sapiens

<400> 4138

Met	Ser	Ser	Ala	Cys	Asp	Ala	Gly	Asp	His	Tyr	Pro	Leu	His	Leu	Leu
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Val	Trp	Lys	Asn	Asp	Tyr	Arg	Gln	Leu	Glu	Lys	Glu	Leu	Gln	Gly	Gln
			20					25					30		
Asn	Val	Glu	Ala	Val	Asp	Pro	Arg	Gly	Arg	Thr	Leu	Leu	His	Leu	Ala
		35					40					45			
Val	Ser	Leu	Gly	His	Leu	Glu	Ser	Ala	Arg	Val	Leu	Leu	Arg	His	Lys
	50					55				60					
Ala	Asp	Val	Thr	Lys	Glu	Asn	Arg	Gln	Gly	Trp	Thr	Val	Leu	His	Glu
65					70					75					80
Ala	Val	Ser	Thr	Gly	Asp	Pro	Glu	Met	Val	Tyr	Thr	Val	Leu	Gln	His
				85					90					95	
Arg	Asp	Tyr	His	Asn	Thr	Ser	Met	Ala	Leu	Glu	Gly	Val	Pro	Glu	Leu
			100					105					110		
Leu	Gln	Lys	Ile	Leu	Glu	Ala	Pro	Asp	Phe	Tyr	Val	Gln	Met	Lys	Trp
		115					120					125			
Glu	Phe	Thr	Ser	Trp	Val	Pro	Leu	Val	Ser	Arg	Ile	Cys	Pro	Asn	Asp
	130					135					140				
Val	Cys	Arg	Ile	Trp	Lys	Ser	Gly	Ala	Lys	Leu	Arg	Val	Asp	Ile	Thr
145					150					155					160
Leu	Leu	Gly	Phe	Glu	Asn	Met	Ser	Trp	Ile	Arg	Gly	Arg	Arg	Ser	Phe
				165					170					175	
Ile	Phe	Lys	Gly	Glu	Asp	Asn	Trp	Ala	Glu	Leu	Met	Glu	Val	Asn	His
			180					185					190		
Asp	Asp	Lys	Val	Val	Thr	Thr	Glu	Arg	Phe	Asp	Leu	Ser	Gln	Glu	Met
		195					200					205			
Glu	Arg	Leu	Thr	Leu	Asp	Leu	Met	Lys	Pro	Lys	Ser	Arg	Glu	Val	Glu
	210					215					220				
Arg	Arg	Leu	Thr	Ser	Pro	Val	Ile	Asn	Thr	Ser	Leu	Asp	Thr	Lys	Asn
225					230					235					240
Ile	Ala	Phe	Glu	Arg	Thr	Lys	Ser	Gly	Phe	Trp	Gly	Trp	Arg	Thr	Asp
				245					250					255	
Lys	Ala	Glu	Val	Val	Asn	Gly	Tyr	Glu	Ala	Lys	Val	Tyr	Thr	Val	Asn
			260					265					270		
Asn	Val	Asn	Val	Ile	Thr	Lys	Ile	Arg	Thr	Glu	His	Leu	Thr	Glu	Glu
			275				280					285			
Glu	Lys	Lys	Arg	Tyr	Lys	Ala	Asp	Arg	Asn	Pro	Leu	Glu	Ser	Leu	Leu
	290					295				300					
Gly	Thr	Val	Glu	His	Gln	Phe	Gly	Ala	Gln	Gly	Asp	Leu	Thr	Thr	Glu
305					310					315					320
Cys	Ala	Thr	Ala	Asn	Asn	Pro	Thr	Ala	Ile	Thr	Pro	Asp	Glu	Tyr	Phe
				325					330				335		
Asn	Glu	Glu	Phe	Asp	Leu	Xaa	Arg	Gln	Gly	His	Trp	Xaa	Gly	Arg	Lys

340 345 350

Ser

<210> 4139
<211> 431
<212> DNA
<213> Homo sapiens

<400> 4139
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120
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180
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240
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300
gttcccatct ccacctctca actggtttgg ggcggctttc ctccatcatt gcctccccgt
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420
ccaggacacg c
431

<210> 4140
<211> 50
<212> PRT
<213> Homo sapiens

<400> 4140
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Leu Cys Leu Pro Glu Ser Arg Ala Leu Leu Ser Ala Ser Pro Glu Val
20 25 30
Val Val Ala Val Gly Phe Pro Gly Gly Lys Cys Pro Val Pro Val Arg
35 40 45
Val Pro
50

<210> 4141
<211> 1182
<212> DNA
<213> Homo sapiens

<400> 4141
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120
cgaaggagga gccggacact tgtctcccgt ctccgagctg ctccccaccc ctggaggaga
180

gacccccccc tcggctcggc gccttctgcg tctcccggct ggtggggaag cctctgcgcc
 240
 gccggcacca tgagtgaaca gagtatctgt caggcaagag ctgctgtgat ggtttatgat
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 480
 caccagtggc gagatgctag acaggtgtat ggtctcaact ttggcagcaa agaggatgcc
 540
 aatgtcttcg caagtgccat gatgcatgcc ttagaagtgt taaattcaca ggaaacaggg
 600
 ccaacattgc ctagacaaaa ctcacaacta cctgctcaag ttcaaaatgg cccatcccaa
 660
 gaagaattgg aaattcaaag aagacaacta caagaacagc aacggcaaaa ggagctggag
 720
 cgggaaaggc tggagcgaga aagaatggaa agagaaaggt tggagagaga gaggttagaa
 780
 agggaaaggc tggagaggga gcgactggaa caagaacagc tggagagaga gagacaagaa
 840
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 960
 gaacgggaga ggcaagaaag ggagcgacaa gagcagttag aaagggaaca gctggaatgg
 1020
 gagagagagc gcagaatatc aagtgtgctt gcccctgcct ctgttgagac tcctctaaac
 1080
 tctgtgctgg gagactcttc tgcttctgag ccaggcttgc aggcagcctc tcagccggcc
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 1182

<210> 4142

<211> 311

<212> PRT

<213> Homo sapiens

<400> 4142

Met	Ser	Glu	Gln	Ser	Ile	Cys	Gln	Ala	Arg	Ala	Ala	Val	Met	Val	Tyr
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Asp	Asp	Ala	Asn	Lys	Lys	Trp	Val	Pro	Ala	Gly	Gly	Ser	Thr	Gly	Phe
		20						25					30		
Ser	Arg	Val	His	Ile	Tyr	His	His	Thr	Gly	Asn	Asn	Thr	Phe	Arg	Val
		35					40					45			
Val	Gly	Arg	Lys	Ile	Gln	Asp	His	Gln	Val	Val	Ile	Asn	Cys	Ala	Ile
	50					55					60				
Pro	Lys	Gly	Leu	Lys	Tyr	Asn	Gln	Ala	Thr	Gln	Thr	Phe	His	Gln	Trp
65				70				75						80	
Arg	Asp	Ala	Arg	Gln	Val	Tyr	Gly	Leu	Asn	Phe	Gly	Ser	Lys	Glu	Asp
			85					90					95		
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<212> DNA
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<211> 231

<212> PRT

<213> Homo sapiens

<400> 4144

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Gly	Asp	Glu	Glu	Glu	Phe	Phe	Glu	Ile	Arg	Thr	Glu	Trp	Ser	Asp	Arg
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Gly Pro Leu Arg Gln Gly Leu Val Ala Ile Lys Glu Ala His Asp Ile				80
	85		90	
Glu Thr Arg Leu Asn Glu Val Glu Lys Leu Leu Lys Thr Ile Ile Ser				95
	100		105	
Met Pro Cys Lys Tyr Ser Arg Ser Glu Val Val Leu Thr Phe Phe Glu				110
	115		120	
Arg Ser Pro Leu Asp Gln Val Leu Lys Asn Asp Asn Val His Lys Ile				125
	130		135	
Gln Pro Ser Phe Gln Ser Pro Val Lys Ile Ser Glu Ile Met Arg Ser				140
		150		155
Asn Gly Phe Cys Leu Ala Asn Thr Glu Thr Ile Val Ile Asp His Ser				160
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	180		185	
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Leu	Asp	Leu	Arg	Leu	Ile	Arg	Thr	Lys	Gly	Gly	Val	Asp	Ala	Ala	Leu		
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Glu	Tyr	Ala	Lys	Thr	Trp	Ser	Arg	Tyr	Ala	Lys	Glu	Leu	Leu	Ala	Trp		
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<212> DNA

<213> Homo sapiens

<400> 4147

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<212> PRT

<213> Homo sapiens

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Val	Ser	Ala	Thr	Gly	Glu	Leu	Leu	Glu	Arg	Thr	Ile	Arg	Ser	Ala	Val	35	40	45	
Glu	Gln	His	Leu	Phe	Asp	Val	Asn	Asn	Ser	Gly	Gly	Gln	Ser	Ser	Glu	50	55	60	
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Gln	Arg	Arg	Arg	Gln	Ser	Lys	Glu	Gln	Asp	Glu	Val	Arg	His	Gly	Arg	85	90	95	
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Ser	Ser	Thr	Lys	Leu	Ser	Glu	Leu	His	Asp	Asn	Gln	Asp	Gly	Leu	Val	145	150	155	160
Asn	Met	Glu	Ser	Leu	Asn	Ser	Thr	Arg	Ser	His	Glu	Arg	Thr	Gly	Pro	165	170	175	
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<213> Homo sapiens

<400> 4149

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<210> 4152

<211> 97

<212> PRT

<213> Homo sapiens

<400> 4152

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Gly	Cys	Pro	Ala	Val	Arg	Lys	Ala	Ser	Ala	Gly	Ala	Ala	Ala	Ala	Val

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                20                25                30
Arg Glu Gly Glu Thr Pro Ala Glu Asp Ala Lys Leu Asp Arg Pro Gly
                35                40                45
Ser Glu Pro Ala Ser Val Ala Pro Asn Gln Asn Leu Leu Cys Ala Pro
                50                55                60
Arg Pro Pro Ser Thr Phe Met Ser Val Leu Leu Leu Arg Gly Gln Val
65                70                75                80
Leu Pro Ser Leu Thr Ala Leu Ala Arg Pro Ala Arg Phe Pro Ser Asn
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Pro

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 <213> Homo sapiens

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<210> 4154
 <211> 110
 <212> PRT
 <213> Homo sapiens

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<400> 4154
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Thr Thr Asn Gln Asn Gly Arg Glu Asn Asn Glu Arg Leu Ser Thr Ser
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Asn Gly Lys Met Ser Pro Thr Arg Phe His Ala Asn Ser Met Gly Gln
                35                40                45
Arg Ser Tyr Ser Phe Glu Ala Ser Glu Glu Asp Leu Asp Val Asn Asp
                50                55                60
Lys Val Glu Glu Leu Met Arg Arg Asp Ser Ser Val Ile Lys Glu Glu
65                70                75                80
Ile Lys Ala Phe Leu Ala Asn Arg Arg Ile Ser Gln Ala Val Asp Thr
                85                90                95
Ile Gly Lys Met Leu Phe Pro Ser Val His Ser Gly Leu Ile
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<211> 1191
<212> DNA
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<210> 4156
<211> 233
<212> PRT
<213> Homo sapiens

<400> 4156
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Asn Val Lys Asp Leu Arg Pro Arg Ala Arg Thr Ile Leu Lys Trp Asn			
35	40	45	
Glu Leu Asn Val Gly Asp Val Val Met Val Asn Tyr Asn Val Glu Ser			
50	55	60	
Pro Gly Gln Arg Gly Phe Trp Phe Asp Ala Glu Ile Thr Thr Leu Lys			
65	70	75	80
Thr Ile Ser Arg Thr Lys Lys Glu Leu Arg Val Lys Ile Phe Leu Gly			
85	90	95	
Gly Ser Glu Gly Thr Leu Asn Asp Cys Lys Ile Ile Ser Val Asp Glu			
100	105	110	
Ile Phe Lys Ile Glu Arg Pro Gly Ala His Pro Leu Ser Phe Ala Asp			
115	120	125	
Gly Lys Phe Leu Arg Arg Asn Asp Pro Glu Cys Asp Leu Cys Gly Gly			
130	135	140	
Asp Pro Glu Lys Lys Cys His Ser Cys Ser Cys Arg Val Cys Gly Gly			
145	150	155	160
Lys His Glu Pro Asn Met Gln Leu Leu Cys Asp Glu Cys Asn Val Ala			
165	170	175	
Tyr His Ile Tyr Cys Leu Asn Pro Pro Leu Asp Lys Val Pro Glu Glu			
180	185	190	
Glu Tyr Trp Tyr Cys Pro Ser Cys Lys Thr Asp Ser Ser Glu Val Val			
195	200	205	
Lys Ala Gly Glu Arg Leu Lys Met Ser Lys Lys Lys Ala Lys Met Pro			
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<210> 4157

<211> 3460

<212> DNA

<213> Homo sapiens

<400> 4157

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540

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<210> 4158

<211> 463

<212> PRT

<213> Homo sapiens

<400> 4158

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Asp Glu Phe Glu Glu Thr Leu Gln Glu Ala Cys Arg His Leu Gly Arg
35 40 45
Tyr Arg Val Ile Gly Arg Met Phe Arg Arg Glu Glu Asn Ala Gln Ala
50 55 60
Ile Leu Leu Glu Leu Ala Gln Asp Ile Asp Tyr Ala Leu Leu Pro Arg
65 70 75 80
Glu Ile Pro Gly Lys Gly Gly Pro Trp Glu Val Ile Val Lys Pro Arg
85 90 95
Asn Ser Asp Gly Glu Phe Leu Asn Arg Leu Asn Arg Phe Leu Glu Glu
100 105 110
Glu Arg Arg Thr Val Ser Asp Met Asn Arg Val Leu Gly Ser Asp Thr
115 120 125
Asn Cys Ser Ala Pro Arg Val Thr Ile Ser Pro Glu Phe Trp Thr Trp
130 135 140
Ala Gln Thr Leu Gly Ala Ala Val Gln Pro Leu Leu Glu Gln Met Leu
145 150 155 160
Tyr Arg Glu Leu Arg Val Phe Ser Gly Asn Thr Ile Ser Ile Pro Gly
165 170 175
Ala Leu Ala Phe Asp Ala Trp Leu Glu His Thr Thr Glu Met Leu Gln
180 185 190
Met Trp Gln Val Pro Glu Gly Glu Lys Arg Arg Arg Leu Met Glu Cys
195 200 205
Leu Arg Gly Pro Ala Leu Gln Val Val Ser Gly Leu Arg Ala Ser Asn
210 215 220
Ala Ser Ile Thr Val Glu Glu Cys Leu Ala Ala Leu Gln Gln Val Phe
225 230 235 240
Gly Pro Val Glu Ser His Lys Ile Ala Gln Val Lys Leu Cys Lys Ala
245 250 255
Tyr Gln Glu Ala Gly Glu Lys Val Ser Ser Phe Val Leu Arg Leu Glu
260 265 270
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Val Asn Gln Thr Arg Leu Lys Arg Val Leu Ser Gly Ala Thr Leu Pro
290 295 300
Asp Lys Leu Arg Asp Lys Leu Lys Leu Met Lys Gln Arg Arg Lys Pro
305 310 315 320
Pro Gly Phe Leu Ala Leu Val Lys Leu Leu Arg Glu Glu Glu Glu Trp
325 330 335
Glu Ala Thr Leu Gly Pro Asp Arg Glu Ser Leu Glu Gly Leu Glu Val
340 345 350
Ala Pro Arg Pro Pro Ala Arg Ile Thr Gly Val Gly Ala Val Pro Leu
355 360 365
Pro Ala Ser Gly Asn Ser Phe Asp Ala Arg Pro Ser Gln Gly Tyr Arg
370 375 380
Arg Arg Arg Gly Arg Gly Gln His Arg Arg Gly Gly Val Ala Arg Ala
385 390 395 400
Gly Ser Arg Gly Ser Arg Lys Arg Lys Arg His Thr Phe Cys Tyr Ser
405 410 415
Cys Gly Glu Asp Gly His Ile Arg Val Gln Cys Ile Asn Pro Ser Asn
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455

460

<210> 4159

<211> 1491

<212> DNA

<213> Homo sapiens

<400> 4159

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<210> 4160

<211> 360

<212> PRT

<213> Homo sapiens

<400> 4160

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			20					25					30		
Pro	Trp	Val	Asn	Asp	Gln	Asp	Val	Pro	Phe	Cys	Pro	Asp	Cys	Gly	Asn
		35					40					45			
Lys	Phe	Ser	Ile	Arg	Asn	Arg	Arg	His	His	Cys	Arg	Leu	Cys	Gly	Ser
	50					55					60				
Ile	Met	Cys	Lys	Lys	Cys	Met	Glu	Leu	Ile	Ser	Leu	Pro	Leu	Ala	Asn
65					70					75					80
Lys	Leu	Thr	Ser	Ala	Ser	Lys	Glu	Ser	Leu	Ser	Thr	His	Thr	Ser	Pro
			85						90					95	
Ser	Gln	Ser	Pro	Asn	Ser	Val	His	Gly	Ser	Arg	Arg	Gly	Ser	Ile	Ser
			100					105					110		
Ser	Met	Ser	Ser	Val	Ser	Ser	Val	Leu	Asp	Glu	Lys	Asp	Asp	Asp	Arg
	115						120					125			
Ile	Arg	Cys	Cys	Thr	His	Cys	Lys	Asp	Thr	Leu	Leu	Lys	Arg	Glu	Gln
	130					135					140				
Gln	Ile	Asp	Glu	Lys	Glu	His	Thr	Pro	Asp	Ile	Val	Lys	Leu	Tyr	Glu
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Lys	Leu	Arg	Leu	Cys	Met	Glu	Lys	Val	Asp	Gln	Lys	Ala	Pro	Glu	Tyr
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		180						185					190		
Glu	His	Ala	Ser	Asp	Leu	Arg	Val	Glu	Val	Gln	Lys	Val	Tyr	Glu	Leu
	195						200					205			
Ile	Asp	Ala	Leu	Ser	Lys	Lys	Ile	Leu	Thr	Leu	Gly	Leu	Asn	Gln	Asp
	210					215					220				
Pro	Pro	Pro	His	Pro	Ser	Asn	Leu	Arg	Leu	Gln	Arg	Met	Ile	Arg	Tyr
225					230					235					240
Ser	Ala	Thr	Leu	Phe	Val	Gln	Glu	Lys	Leu	Leu	Gly	Leu	Met	Ser	Leu
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Pro	Thr	Lys	Glu	Gln	Phe	Glu	Glu	Leu	Lys	Lys	Lys	Arg	Lys	Glu	Glu
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Met	Glu	Arg	Lys	Arg	Ala	Val	Glu	Arg	Gln	Ala	Ala	Leu	Glu	Ser	Gln
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Gly	Glu	Val	Ala	Ser	Leu	Arg	Arg	Gly	Pro	Ala	Pro	Leu	Lys	Lys	Ala
305					310					315					320
Glu	Gly	Trp	Leu	Pro	Leu	Ser	Gly	Gly	Gln	Gly	Gln	Ser	Glu	Asp	Ser
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<210> 4161
<211> 3316
<212> DNA
<213> Homo sapiens

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<210> 4162

<211> 859

<212> PRT

<213> Homo sapiens

<400> 4162

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Ile	Gln	Gly	Ser	Arg	Arg	Cys	Asn	Leu	Asp	Trp	Leu	Thr	Ile	Glu	Thr
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290 295 300
Lys Leu Asp Gly Thr Gly Tyr Gly Asp Tyr Val Lys Ile Tyr Asp Gly
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His Phe Cys Ala Asp Lys Val Asn Ala Ala Arg Gly Phe Asn Ala Thr
355 360 365
Tyr Gln Val Asp Gly Phe Cys Leu Pro Trp Glu Ile Pro Cys Gly Gly
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Cys Pro Asn Gly Arg Asp Glu Thr Asn Cys Thr Met Cys Gln Lys Glu
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Glu Phe Pro Cys Ser Arg Asn Gly Val Cys Tyr Pro Arg Ser Asp Arg
420 425 430
Cys Asn Tyr Gln Asn His Cys Pro Asn Gly Ser Asp Glu Lys Asn Cys
435 440 445
Phe Phe Cys Gln Pro Gly Asn Phe His Cys Lys Asn Asn Arg Cys Val
450 455 460
Phe Glu Ser Trp Val Cys Asp Ser Gln Asp Asp Cys Gly Asp Gly Ser
465 470 475 480
Asp Glu Glu Asn Cys Pro Val Ile Val Pro Thr Arg Val Ile Thr Ala
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Gly Cys Thr Cys Lys Leu Tyr Ser Leu Arg Met Phe Glu Arg Arg Ser
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Phe Glu Thr Gln Leu Ser Arg Val Glu Ala Glu Leu Leu Arg Arg Glu
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Val Glu Asp Phe Pro Val Cys Ser Pro Asn Gln Ala Ser Val Leu Glu
565 570 575
Asn Leu Arg Leu Ala Val Arg Ser Gln Leu Gly Phe Thr Ser Val Arg
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Leu Pro Met Ala Gly Arg Ser Ser Asn Ile Trp Asn Arg Ile Phe Asn
595 600 605
Phe Ala Arg Ser Arg His Ser Gly Ser Leu Ala Leu Val Ser Ala Asp
610 615 620
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625 630 635 640
Asn His Thr His Arg Ser Leu Phe Ser Val Glu Ser Asp Asp Thr Asp
645 650 655
Thr Glu Asn Glu Arg Arg Asp Met Ala Gly Ala Ser Gly Gly Val Ala
660 665 670
Ala Pro Leu Pro Gln Lys Val Pro Pro Thr Thr Ala Val Glu Ala Thr
675 680 685
Val Gly Ala Cys Ala Ser Ser Ser Thr Gln Ser Thr Arg Gly Gly His

690	695	700
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Pro Ala Arg His Gln Leu Thr Ser Ala Leu Ser Arg Met Thr Gln Gly		720
	725	730
Leu Arg Trp Val Arg Phe Thr Leu Gly Arg Ser Ser Ser Leu Ser Gln		735
	740	745
Asn Gln Ser Pro Leu Arg Gln Leu Asp Asn Gly Val Ser Gly Arg Glu		750
	755	760
Asp Asp Asp Asp Val Glu Met Leu Ile Pro Ile Ser Asp Gly Ser Ser		765
	770	775
Asp Phe Asp Val Asn Asp Cys Ser Arg Pro Leu Leu Asp Leu Ala Ser		780
	785	790
Asp Gln Gly Gln Gly Leu Arg Gln Pro Tyr Asn Ala Thr Asn Pro Gly		795
	800	805
Val Arg Pro Ser Asn Arg Asp Gly Pro Cys Glu Arg Cys Gly Ile Val		810
	815	820
His Thr Ala Gln Ile Pro Asp Thr Cys Leu Glu Val Thr Leu Lys Asn		825
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Glu Thr Ser Asp Asp Glu Ala Leu Leu Leu Cys		840
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<210> 4163

<211> 568

<212> DNA

<213> Homo sapiens

<400> 4163

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<210> 4164

<211> 187

<212> PRT

<213> Homo sapiens

<400> 4164

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 20           25           30
Cys Gly Leu Gln Asp Pro Ala Gly Ser Arg Pro Leu Ser Pro Pro Phe
 35           40           45
Ser Arg Leu Arg Ser Glu Gly Ser Lys Ser Val Leu Pro Gln Trp Leu
 50           55           60
Trp Gly Met Lys Gly Ile Pro Val Pro Ser Gly His Pro Gln Ala Asp
 65           70           75           80
Gly Arg Arg Ala Leu Val Arg Ala Val Gly His Pro Gln Asp Leu Leu
 85           90           95
Thr Glu Ala Ser Pro Arg Cys Pro Ala Gly Pro Ser Pro Leu Arg Ser
 100          105          110
Thr Gly Arg Lys Pro Pro Gly Pro Pro Arg Gly Gly Asp Leu Ala Ala
 115          120          125
Pro Val Leu Phe Lys Ala Trp Ala Thr Ser Leu Ala Cys Pro Lys Trp
 130          135          140
Gln Ala Leu Arg Arg Ala Arg Met Val Pro Val Val Gln Gly Ser Pro
 145          150          155          160
Pro Ala Trp Ala Ala Pro Val Pro Trp Asn Leu Leu Pro Trp Gly Pro
 165          170          175
Trp Thr Cys Arg His Met Ala Ile Glu Leu Gln
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<210> 4165

<211> 717

<212> DNA

<213> Homo sapiens

<400> 4165

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<210> 4166

<211> 166

<212> PRT

<213> Homo sapiens

<400> 4166

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			20					25					30		
Arg	Arg	Thr	Gly	Gln	Tyr	Lys	Gly	Leu	Leu	Asp	Cys	Ala	Arg	Arg	Ile
		35					40					45			
Leu	Glu	Arg	Glu	Gly	Pro	Arg	Ala	Phe	Tyr	Arg	Gly	Tyr	Leu	Pro	Asn
	50					55					60				
Val	Leu	Gly	Ile	Ile	Pro	Tyr	Ala	Gly	Ile	Asp	Leu	Ala	Val	Tyr	Glu
65					70					75				80	
Thr	Leu	Lys	Asn	Trp	Trp	Leu	Gln	Gln	Tyr	Ser	His	Asp	Ser	Ala	Asp
			85					90						95	
Pro	Gly	Ile	Leu	Val	Leu	Leu	Ala	Cys	Gly	Thr	Ile	Ser	Ser	Thr	Cys
			100					105						110	
Gly	Gln	Ile	Ala	Ser	Tyr	Pro	Leu	Ala	Leu	Val	Arg	Thr	Arg	Met	Gln
		115					120					125			
Ala	Gln	Gly	Phe	His	His	Val	Ala	Gln	Ala	His	Leu	Glu	Leu	Val	Gly
	130					135					140				
Ser	Arg	Asn	Ser	Pro	Ala	Phe	Ser	Leu	Pro	Thr	Cys	Trp	Asp	Tyr	Arg
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Lys	Pro	Val	Val	Met	Pro										
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<210> 4167

<211> 897

<212> DNA

<213> Homo sapiens

<400> 4167

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<210> 4168

<211> 299

<212> PRT

<213> Homo sapiens

<400> 4168

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			20					25					30		
Gln	Thr	Ala	Gly	Val	Gln	Trp	Arg	Asp	Leu	Ser	Pro	Pro	Gln	Leu	Pro
		35					40					45			
Pro	Pro	Gly	Ile	Lys	Gln	Ser	Ser	Cys	Phe	Ser	Leu	Leu	Ser	Ser	Leu
	50					55					60				
Asp	Tyr	Arg	Tyr	Gly	Arg	Val	Glu	Ser	Val	Lys	Ile	Leu	Pro	Lys	Arg
65					70					75				80	
Gly	Ser	Glu	Gly	Gly	Val	Ala	Ala	Phe	Val	Asp	Phe	Val	Asp	Ile	Lys
			85						90					95	
Ser	Ala	Gln	Lys	Ala	His	Asn	Ser	Val	Asn	Lys	Met	Gly	Asp	Arg	Asp
			100						105				110		
Leu	Arg	Thr	Asp	Tyr	Asn	Glu	Pro	Gly	Thr	Ile	Pro	Ser	Ala	Ala	Arg
		115					120						125		
Gly	Leu	Asp	Asp	Thr	Val	Ser	Ile	Ala	Ser	Arg	Ser	Arg	Glu	Val	Ser
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Gly	Phe	Arg	Gly	Gly	Gly	Gly	Gly	Pro	Ala	Tyr	Gly	Pro	Pro	Pro	Ser
145					150					155					160
Leu	His	Ala	Arg	Glu	Gly	Arg	Tyr	Glu	Arg	Arg	Leu	Asp	Gly	Ala	Ser
			165						170					175	
Asp	Asn	Arg	Glu	Arg	Ala	Tyr	Glu	His	Ser	Ala	Tyr	Gly	His	His	Glu
		180						185					190		
Arg	Gly	Thr	Gly	Gly	Phe	Asp	Arg	Thr	Arg	His	Tyr	Asp	Gln	Asp	Tyr
	195						200						205		
Tyr	Arg	Asp	Pro	Arg	Glu	Arg	Thr	Leu	Gln	His	Gly	Leu	Tyr	Tyr	Ala
	210					215						220			
Ser	Arg	Ser	Arg	Ser	Pro	Asn	Arg	Phe	Asp	Ala	His	Asp	Pro	Arg	Tyr
225					230					235					240
Glu	Pro	Arg	Ala	Arg	Glu	Gln	Phe	Thr	Leu	Pro	Ser	Val	Val	His	Arg
			245						250					255	
Asp	Ile	Tyr	Arg	Asp	Asp	Ile	Thr	Arg	Glu	Val	Arg	Gly	Arg	Arg	Pro

	260		265		270											
Glu	Arg	Asn	Tyr	Gln	His	Ser	Arg	Ser	Arg	Ser	Pro	His	Ser	Ser	Gln	
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<210> 4169

<211> 4743

<212> DNA

<213> Homo sapiens

<400> 4169

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 <212> PRT
 <213> Homo sapiens

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 Leu Arg Pro Glu Glu Ser Leu Asp Pro Pro Gly Ala Met Gln Glu Leu
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 Pro Ser Pro Gln Gly Thr Lys Ala Pro Arg Phe Val Pro Leu Thr Ser
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 Ile Cys Phe Pro Asp Ser Leu Leu Gln Asp Glu Glu Arg Ser Phe Phe
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 Lys Ala Gly Pro Pro Glu Asp Glu Gly Asp Pro Lys Ala Gly Ala Gly
 145 150 155 160
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 Pro Asn Lys Pro Pro Glu Leu Pro Ser Thr Val Asn Ala Glu Pro Leu
 195 200 205
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 210 215 220
 Pro Pro Pro Pro Pro Pro Ala Pro Ala Ser Glu Pro Lys Gly Gly Leu
 225 230 235 240
 Thr Ser Pro Ile Phe Cys Ser Thr Lys Pro Lys Lys Leu Leu Lys Thr
 245 250 255
 Ser Ser Phe His Leu Leu Arg Arg Arg Asp Pro Pro Phe Gln Thr Pro
 260 265 270
 Lys Lys Leu Tyr Ala Gln Glu Tyr Glu Phe Glu Ala Asp Glu Asp Lys
 275 280 285
 Ala Asp Val Pro Ala Asp Ile Arg Leu Asn Pro Arg Arg Leu Pro Asp

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305	310	315
Ile Asp Phe Cys Leu Pro	Asn Pro Gly Pro	Asp Gly Pro Arg Arg Arg
325	330	335
Gly Arg Lys Pro Thr Lys	Ala Lys Arg Asp	Gly Pro Pro Arg Pro Arg
340	345	350
Gly Arg Pro Arg Ile Arg	Pro Leu Glu Val Pro	Thr Thr Ala Gly Pro
355	360	365
Ala Ser Ala Ser Thr Pro	Thr Asp Gly Ala Lys	Lys Pro Arg Gly Arg
370	375	380
Gly Arg Gly Arg Gly Arg	Lys Ala Glu Glu Ala	Gly Gly Thr Arg Leu
385	390	395
Glu Pro Leu Lys Pro Leu	Lys Ile Lys Leu Ser	Val Pro Lys Ala Gly
405	410	415
Glu Gly Leu Gly Thr Ser	Ser Gly Asp Ala Ile	Ser Gly Thr Asp His
420	425	430
Asn Ser Leu Asp Ser Ser	Leu Thr Arg Glu Lys	Ile Glu Ala Lys Ile
435	440	445
Lys Glu Val Glu Glu Lys	Gln Pro Glu Met Lys	Ser Gly Phe Met Ala
450	455	460
Ser Phe Leu Asp Phe Leu	Lys Ser Gly Lys Arg	His Pro Pro Leu Tyr
465	470	475
Gln Ala Gly Leu Thr Pro	Pro Leu Ser Pro Lys	Ser Val Pro Pro
485	490	495
Ser Val Pro Ala Arg Gly	Leu Gln Pro Gln Pro	Pro Ala Thr Pro Ala
500	505	510
Val Pro His Pro Pro Pro	Ser Gly Ala Phe Gly	Leu Gly Gly Ala Leu
515	520	525
Glu Ala Ala Glu Ser Glu	Gly Leu Gly Leu Gly	Cys Pro Ser Pro Cys
530	535	540
Lys Arg Leu Asp Glu Glu	Leu Lys Arg Asn Leu	Glu Thr Leu Pro Ser
545	550	555
Phe Ser Ser Asp Glu Glu	Asp Ser Val Ala Lys	Asn Arg Asp Leu Gln
565	570	575
Glu Ser Ile Ser Ser Ala	Ile Ser Ala Leu Asp	Asp Pro Pro Leu Ala
580	585	590
Gly Pro Lys Asp Thr Ser	Thr Pro Asp Gly Pro	Pro Pro Leu Ala Pro
595	600	605
Ala Ala Val Pro Gly Pro	Pro Pro Leu Pro Gly	Leu Pro Ser Ala Asn
610	615	620
Ser Asn Gly Thr Pro Glu	Pro Pro Leu Leu Glu	Glu Glu Lys Pro Pro
625	630	635
Thr Pro Pro Pro Ala Pro	Thr Pro Gln Pro Gln	Pro Pro Pro Pro Pro
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Pro Pro Pro Gln Pro Ala	Leu Pro Ser Pro Pro	Pro Leu Val Ala Pro
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675	680	685
Ala Met Pro Ser Pro Pro	Pro Pro Pro Pro Pro	Ala Ala Ala Pro Leu
690	695	700
Ala Ala Pro Pro Glu Glu	Pro Ala Ala Pro Ser	Pro Glu Asp Pro Glu
705	710	715
Leu Pro Asp Thr Arg Pro	Leu His Leu Ala Lys	Lys Gln Glu Thr Ala

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 755 760 765
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 770 775 780
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 Gly Asp Ala Lys Asn Arg Tyr Gln Arg Leu Tyr Val Lys Phe Leu Glu
 820 825 830
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 835 840 845
 His Arg Pro Pro Val Pro Val Arg Arg Ser Gly Gln Ala Lys Asn Pro
 850 855 860
 Val Ser Ala Gly Gly Ser Ser Ala Pro Pro Pro Lys Ala Pro Ala Pro
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<210> 4171

<211> 889

<212> DNA

<213> Homo sapiens

<400> 4171

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 <211> 184
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Val Phe Ile Leu Pro Leu Asp Val Ser Thr Thr Ile Tyr Asn Arg Cys
 50 55 60
 Lys His Ala Ala Gln Ile Gln Ala Leu Leu Arg Ile Ala Thr Leu Gln
 65 70 75 80
 Asp Cys Ala Thr Ala Asn Pro Val Pro Ser Gln His Pro Cys Phe Lys
 85 90 95
 Pro Trp Ser Tyr Ile Pro Asp Gly Ile Met Pro Ile Phe Trp Arg Val
 100 105 110
 Val Tyr Trp Thr Ser Gln Phe Leu Thr Trp Ile Leu Leu Pro Phe Met
 115 120 125
 Gln Ser Tyr Ala Arg Ser Gly Gly Phe Ser Ile Thr Gly Lys Ile Lys
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 Thr Ala Leu Ile Glu Asn Ala Ile Tyr Tyr Gly Thr Tyr Leu Leu Ile
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 <213> Homo sapiens

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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Pro Leu Leu Cys Cys Cys Val Gln Ala Trp His Leu Gln Asp Gly Asp
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<210> 4176

<211> 586

<212> PRT

<213> Homo sapiens

<400> 4176

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Pro	Gln	Ala	Trp	Asp	Asp	Ser	Leu	Ile	Asp	Ser	Ser	Pro	Leu	Leu	His
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Asn	Pro	Ser	Ala	Ser	Ile	Asn	Asn	Asp	Tyr	Phe	Glu	Asp	Leu	Lys	Lys
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Tyr	Cys	Phe	His	Arg	Ser	Val	Asn	Arg	Glu	Thr	Lys	Val	Lys	Phe	Val
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His	Thr	Ser	Val	His	Gly	Val	Gly	His	Ser	Phe	Val	Gln	Ser	Ala	Phe
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Ala Glu Lys Gln Asp Ser Gly Glu Trp Arg Val Phe Ser Gly Asn Glu
305                310                315                320
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Asn Gln Asp Arg Ser Ala Leu Lys Asp Thr Tyr Met Leu Ser Ser Thr
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Val Ser Ser Lys Ile Leu Arg Ala Ile Ala Leu Lys Glu Gly Phe His
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Phe Glu Glu Thr Leu Thr Gly Phe Lys Trp Met Gly Asn Arg Ala Lys
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Gln Leu Ile Asp Gln Gly Lys Thr Val Leu Phe Ala Phe Glu Glu Ala
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Ile Gly Tyr Met Cys Cys Pro Phe Val Leu Asp Lys Asp Gly Val Ser
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Leu Ser Leu Ser Gln Gln Leu Lys Ala Ile Tyr Val Glu Tyr Gly Tyr
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Lys Lys Leu Phe Glu Asn Leu Arg Asn Tyr Asp Gly Lys Asn Asn Tyr
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Pro Lys Ala Cys Gly Lys Phe Glu Ile Ser Ala Ile Arg Asp Leu Thr
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Ser Lys Ser Ser Gln Met Ile Thr Phe Thr Phe Ala Asn Gly Gly Val
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<210> 4177

<211> 4763

<212> DNA

<213> Homo sapiens

<400> 4177

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<211> 398

<212> PRT

<213> Homo sapiens

<400> 4178

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Gly Gln His Tyr Asn Ile Ser Pro Gln Asp Leu Glu Thr Val Phe Pro
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His Gly Leu Pro Pro Arg Phe Val Met Gln Val Lys Thr Phe Ser Glu
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<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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 <212> DNA
 <213> Homo sapiens

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<210> 4183

<211> 1129

<212> DNA

<213> Homo sapiens

<400> 4183

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<212> PRT

<213> Homo sapiens

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Thr	His	Pro	Gln	Met	Gln	Gln	Ala	Ser	Val	Ser	Ser	Pro	Ile	Val	Ala
65					70					75					80
Gly	Gly	Leu	Arg	Asn	Ile	His	Asp	Asn	Lys	Val	Ser	Gly	Pro	Leu	Ser
				85				90					95		
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			100					105					110		
Glu	Asp	Tyr	Leu	His	Met	Val	His	Arg	Leu	Ser	Ser	Asp	Asp	Gly	Asp
	115						120					125			
Ser	Ser	Thr	Met	Arg	Asn	Ala	Ala	Ser	Phe	Pro	Leu	Arg	Ser	Pro	Gln
		130				135					140				
Pro	Val	Cys	Ser	Pro	Ala	Gly	Ser	Glu	Gly	Thr	Pro	Lys	Gly	Ser	Arg
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Pro	Pro	Leu	Ile	Leu	Gln	Ser	Gln	Ser	Leu	Pro	Cys	Ser	Ser	Pro	Arg
				165					170					175	
Asp	Val	Pro	Pro	Asp	Ile	Leu	Leu	Asp	Ser	Pro	Glu	Arg	Lys	Gln	Lys
			180					185					190		
Lys	Gln	Lys	Lys	Met	Lys	Leu	Gly	Lys	Asp	Glu	Lys	Glu	Gln	Ser	Glu
	195						200					205			
Lys	Ala	Ala	Met	Tyr	Asp	Ile	Ile	Ser	Ser	Pro	Ser	Lys	Asp	Ser	Thr
	210					215					220				
Lys	Leu	Thr	Leu	Arg	Leu	Ser	Arg	Val	Arg	Ser	Ser	Asp	Met	Asp	Gln
225					230					235					240
Gln	Glu	Asp	Met	Leu	Ser	Gly	Met	Glu	Asn	Ser	Asn	Val	Ser	Glu	Asn
				245					250					255	
Asp	Ile	Pro	Phe	Asn	Val	Gln	Tyr	Gln	Gly	Gln	Thr	Ser	Lys	Thr	Pro
			260					265					270		
Ile	Thr	Pro	Gln	Asp	Val	Asn	Arg	Pro	Leu	Asn	Ala	Ala	Gln	Cys	Leu

275	280	285
Ser Gln Gln Glu Gln Thr Ala Phe Leu Pro Ala Asn Gln Val Pro Val		
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Leu Gln Gln Asn Thr Ser Val Ala Thr Lys Gln Pro Gln Thr Ser Val		
305	310	315
Val Gln Asn Gln Gln Gln Ile Ser Gln Gln Gly Pro Ile Tyr Asp Glu		
325	330	335
Val Glu Leu Asp Ala Leu Ala Glu Ile Glu Arg Ile Glu Arg Glu Ser		
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<210> 4185

<211> 1481

<212> DNA

<213> Homo sapiens

<400> 4185

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1020

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 1140
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<210> 4186

<211> 385

<212> PRT

<213> Homo sapiens

<400> 4186

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			20					25					30		
Gln	Gln	Ala	Glu	Lys	Ile	Leu	Lys	Ser	Met	Asp	Lys	Asn	Gly	Thr	Met
		35					40					45			
Thr	Ile	Asp	Trp	Asn	Glu	Trp	Arg	Asp	Tyr	His	Leu	Leu	His	Pro	Val
	50					55					60				
Glu	Asn	Ile	Pro	Glu	Ile	Ile	Leu	Tyr	Trp	Lys	His	Ser	Thr	Ile	Phe
65					70					75					80
Asp	Val	Gly	Glu	Asn	Leu	Thr	Val	Pro	Asp	Glu	Phe	Thr	Val	Glu	Glu
				85					90					95	
Arg	Gln	Thr	Gly	Met	Trp	Trp	Arg	His	Leu	Val	Ala	Gly	Gly	Gly	Ala
			100					105					110		
Gly	Ala	Val	Ser	Arg	Thr	Cys	Thr	Ala	Pro	Leu	Asp	Arg	Leu	Lys	Val
		115					120					125			
Leu	Met	Gln	Val	His	Ala	Ser	Arg	Ser	Asn	Asn	Met	Gly	Ile	Val	Gly
	130					135					140				
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Gly	Asn	Gly	Ile	Asn	Val	Leu	Lys	Ile	Ala	Pro	Glu	Ser	Ala	Ile	Lys
			165						170					175	
Phe	Met	Ala	Tyr	Glu	Gln	Ile	Lys	Arg	Leu	Val	Gly	Ser	Asp	Gln	Glu
		180						185					190		
Thr	Leu	Arg	Ile	His	Glu	Arg	Leu	Val	Ala	Gly	Ser	Leu	Ala	Gly	Ala
	195						200						205		
Ile	Ala	Gln	Ser	Ser	Ile	Tyr	Pro	Met	Glu	Val	Leu	Lys	Thr	Arg	Met
	210					215						220			
Ala	Leu	Arg	Lys	Thr	Gly	Gln	Tyr	Ser	Gly	Met	Leu	Asp	Cys	Ala	Arg
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120
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180
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240
gtggaggagg atgactacga cacattgacc gacatcgatt ccgacaagaa tgtcattcgc
300
accaagcaat acctctatgt ggctgacctg gcacggaagg acaagcgtgt tctgcggaaa
360
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420
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540
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600
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660
cccaaacact ttgggctttt ctacgccatg ggcacagccc tgatgatgga ggggctgctc
720
agtgcttgct atcatgtgtg cccaactat accaatttcc agtttggtga gtggggcgctc
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840
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<210> 4188

<211> 272

<212> PRT

<213> Homo sapiens

<400> 4188

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Pro	Arg	Val	Leu	Ala	Asp	Ser	Phe	Pro	Asp	Ser	Ser	Pro	Tyr	Glu	Gly
		20						25					30		
Tyr	Asn	Tyr	Gly	Ser	Phe	Glu	Asn	Val	Ser	Gly	Ser	Thr	Asp	Gly	Leu
		35					40					45			
Val	Asp	Ser	Ala	Gly	Thr	Gly	Asp	Leu	Ser	Tyr	Gly	Tyr	Gln	Gly	Arg
	50					55					60				
Ser	Phe	Glu	Pro	Val	Gly	Thr	Arg	Pro	Arg	Val	Asp	Ser	Met	Ser	Ser
65					70				75					80	
Val	Glu	Glu	Asp	Asp	Tyr	Asp	Thr	Leu	Thr	Asp	Ile	Asp	Ser	Asp	Lys
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Asn	Val	Ile	Arg	Thr	Lys	Gln	Tyr	Leu	Tyr	Val	Ala	Asp	Leu	Ala	Arg
			100					105					110		
Lys	Asp	Lys	Arg	Val	Leu	Arg	Lys	Lys	Tyr	Gln	Ile	Tyr	Phe	Trp	Asn
		115					120						125		
Ile	Ala	Thr	Ile	Ala	Val	Phe	Tyr	Ala	Leu	Pro	Val	Val	Gln	Leu	Val
		130				135					140				
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145				150					155					160	
Cys	Ser	Ser	Asn	Phe	Leu	Cys	Ala	His	Pro	Leu	Gly	Asn	Leu	Ser	Ala
			165					170					175		
Phe	Asn	Asn	Ile	Leu	Ser	Asn	Leu	Gly	Tyr	Ile	Leu	Leu	Gly	Leu	Leu
		180						185					190		
Phe	Leu	Leu	Ile	Ile	Leu	Gln	Arg	Glu	Ile	Asn	His	Asn	Arg	Ala	Leu
		195				200						205			
Leu	Arg	Asn	Asp	Leu	Cys	Ala	Leu	Glu	Cys	Gly	Ile	Pro	Lys	His	Phe
		210				215					220				
Gly	Leu	Phe	Tyr	Ala	Met	Gly	Thr	Ala	Leu	Met	Met	Glu	Gly	Leu	Leu
225				230					235					240	
Ser	Ala	Cys	Tyr	His	Val	Cys	Pro	Asn	Tyr	Thr	Asn	Phe	Gln	Phe	Gly
			245					250						255	
Glu	Trp	Gly	Val	Leu	Leu	Phe	Trp	Leu	Asn	Leu	Gln	Gln	Gly	Pro	Ala
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<210> 4189

<211> 1570

<212> DNA

<213> Homo sapiens

<400> 4189

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240
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360
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420
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600
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1080
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1140
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1440
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<210> 4190
 <211> 523
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Asp Glu Thr Asn Lys Gly Thr Lys Thr Glu Gly Glu Thr Glu Val Lys
 50 55 60
 Lys Asp Glu Ala Gly Glu Asn Tyr Ser Lys Asp Gln Gly Gly Arg Thr
 65 70 75 80
 Leu Cys Gly Val Met Arg Ile Gly Leu Val Ala Lys Gly Leu Leu Ile
 85 90 95
 Lys Asp Asp Met Asp Leu Glu Leu Val Leu Met Cys Lys Asp Lys Pro
 100 105 110
 Thr Glu Thr Leu Leu Asn Thr Val Lys Asp Asn Leu Pro Ile Gln Ile
 115 120 125
 Gln Lys Leu Thr Glu Glu Lys Tyr Gln Val Glu Gln Cys Val Asn Glu
 130 135 140
 Ala Ser Ile Ile Ile Arg Asn Thr Lys Glu Pro Thr Leu Thr Leu Lys
 145 150 155 160
 Val Ile Leu Thr Ser Pro Leu Ile Arg Asp Glu Leu Glu Lys Lys Asp
 165 170 175
 Gly Glu Asn Val Ser Met Lys Asp Pro Pro Asp Leu Leu Asp Arg Gln
 180 185 190
 Lys Cys Leu Asn Ala Leu Ala Ser Leu Arg His Ala Lys Trp Phe Gln
 195 200 205
 Ala Arg Ala Asn Gly Leu Lys Ser Cys Val Ile Val Leu Arg Ile Leu
 210 215 220
 Arg Asp Leu Cys Asn Arg Val Pro Thr Trp Ala Pro Leu Lys Gly Trp
 225 230 235 240
 Pro Leu Glu Leu Ile Cys Glu Lys Ser Ile Gly Thr Cys Asn Arg Pro
 245 250 255
 Leu Gly Ala Gly Glu Ala Leu Arg Arg Val Met Glu Cys Leu Ala Ser
 260 265 270
 Gly Ile Leu Leu Pro Gly Gly Pro Gly Leu His Asp Pro Cys Glu Arg
 275 280 285
 Asp Pro Thr Asp Ala Leu Ser Tyr Met Thr Ile Gln Gln Lys Glu Asp
 290 295 300
 Ile Thr His Ser Ala Gln His Ala Leu Arg Leu Ser Ala Phe Gly Gln
 305 310 315 320
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<210> 4191
<211> 1661
<212> DNA
<213> Homo sapiens
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240
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420
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720
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<210> 4192

<211> 517

<212> PRT

<213> Homo sapiens

<400> 4192

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		20						25					30		
Trp	Arg	Ala	Val	Gln	Gly	Ile	Arg	Gly	Glu	Thr	Lys	Ser	Cys	Gln	Thr
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Ala	Ser	Ile	Ala	Thr	Ala	Ser	Ala	Ser	Ala	Gln	Ala	Arg	Asn	His	Val
	50					55				60					
Asp	Ala	Gln	Val	Gln	Thr	Glu	Ala	Pro	Val	Pro	Val	Ser	Val	Gln	Pro
65				70						75				80	
Pro	Ser	Gln	Tyr	Asp	Ile	Pro	Arg	Leu	Ala	Ala	Phe	Leu	Arg	Arg	Val
			85					90					95		
Glu	Ala	Met	Val	Ile	Arg	Glu	Leu	Asn	Lys	Asn	Trp	Gln	Ser	His	Ala
		100						105				110			
Phe	Asp	Gly	Phe	Glu	Val	Asn	Trp	Thr	Glu	Gln	Gln	Gln	Met	Val	Ser

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<210> 4193
<211> 6439
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<212> DNA

<213> Homo sapiens

<400> 4193

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720
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<212> DNA

<213> Homo sapiens

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<212> DNA

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<212> PRT

<213> Homo sapiens

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<211> 1769

<212> DNA

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<400> 4199

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 Gln Pro Val Gly Gly Gly Gly Ser Pro Ser Asp Phe Tyr Leu Cys Ser
 50 55 60
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		115					120					125			
Gln	Ala	Ala	Ala	Ile	Leu	Ser	Thr	Leu	Leu	Ala	Ala	Glu	Val	Ile	Pro
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Thr	Thr	Val	Arg	Gly	Arg	Gly	Leu	Gly	Leu	Ile	Met	Ala	Leu	Gly	Ala
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Leu	Gly	Gly	Leu	Ser	Gly	Pro	Ala	Gln	Arg	Leu	His	Met	Gly	His	Gly
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<212> DNA

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<400> 4203

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<213> Homo sapiens

<400> 4204

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			20					25					30		
Tyr	Thr	Val	Val	Pro	Phe	Val	Leu	Leu	Ser	Ile	Lys	Pro	Ser	Leu	Thr
		35					40				45				
Phe	Tyr	Ser	Ser	Trp	Tyr	Tyr	Cys	Leu	His	Ile	Leu	Gly	Ile	Leu	Val
	50					55				60					
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<210> 4205

<211> 6523

<212> DNA

<213> Homo sapiens

<400> 4205

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<211> 829

<212> PRT

<213> Homo sapiens

<400> 4206

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Val Thr Gly Leu Tyr Pro His His Arg Ser Leu Ser Gly Cys Pro His			
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Ile Glu Val Asp Glu Asn Gly Thr Leu Asp Leu Ser Met His Lys His			
370	375	380	
Arg Lys Arg Glu Asn Ala Phe Pro Ser Ser Ser Ser Cys Ser Ser Ser			
385	390	395	400
Pro Gly Val Lys Ser Pro Asp Ala Ser Gln Arg His Ser Ser Thr Ser			
405	410	415	
Ala Pro Ser Ser Ser Met Thr Ser Pro Gln Ser Ser Gln Ala Ser Arg			
420	425	430	
Gln Asp Glu Trp Asp Arg Pro Leu Asp Tyr Thr Lys Pro Ser Arg Leu			

435 440 445
 Arg Glu Glu Glu Pro Glu Glu Ser Glu Pro Ala Ala His Ser Phe Ala
 450 455 460
 Ser Ser Glu Ala Asp Asp Gln Glu Val Ser Glu Glu Asn Phe Glu Glu
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 Arg Lys Tyr Pro Gly Glu Val Thr Leu Thr Asn Phe Lys Leu Lys Phe
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 Leu Ser Lys Asp Ile Lys Lys Glu Leu Leu Thr Cys Pro Thr Pro Gly
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 Cys Asp Gly Ser Gly His Ile Thr Gly Asn Tyr Ala Ser His Arg Ser
 515 520 525
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 Ala His Ser Ala Asp Leu Lys Cys Pro Thr Pro Gly Cys Asp Gly Ser
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 Gly His Ile Thr Gly Asn Tyr Ala Ser His Arg Ser Leu Ser Gly Cys
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 580 585 590
 Lys Glu Asp Pro Glu Leu Met Lys Cys Pro Val Pro Gly Cys Val Gly
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 Cys Pro Leu Ala Ala Arg Arg Gln Lys Glu Gly Ser Leu Asn Gly Ser
 625 630 635 640
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 Pro Gly Cys Asp Gly Ser Gly His Ala Asn Gly Ser Phe Leu Thr His
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 675 680 685
 Lys Leu Ser Gly Asp Glu Val Leu Ser Pro Lys Phe Lys Thr Ser Asp
 690 695 700
 Val Leu Glu Asn Asp Glu Glu Ile Lys Gln Leu Asn Gln Glu Ile Arg
 705 710 715 720
 Asp Leu Asn Glu Ser Asn Ser Glu Met Glu Ala Ala Met Val Gln Leu
 725 730 735
 Gln Ser Gln Ile Ser Ser Met Glu Lys Asn Leu Lys Asn Ile Glu Glu
 740 745 750
 Glu Asn Lys Leu Ile Glu Glu Gln Asn Glu Ala Leu Phe Leu Glu Leu
 755 760 765
 Ser Gly Leu Ser Gln Ala Leu Ile Gln Ser Leu Ala Asn Ile Arg Leu
 770 775 780
 Pro His Met Glu Pro Ile Cys Glu Gln Asn Phe Asp Ala Tyr Val Ser
 785 790 795 800
 Thr Leu Thr Asp Met Tyr Ser Asn Gln Asp Pro Glu Asn Lys Asp Leu
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<210> 4207

<211> 1016

<212> DNA

<213> Homo sapiens

<400> 4207

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 180
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 420
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<210> 4208

<211> 193

<212> PRT

<213> Homo sapiens

<400> 4208

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			20					25					30		
Ile	Asp	Arg	Arg	Thr	Ser	Thr	Pro	Asn	Ser	Arg	Ile	Gln	Arg	Ala	Thr
			35				40					45			
Thr	Val	Ser	Gln	Lys	Lys	Ser	Ser	Lys	Leu	Cys	Thr	Cys	Thr	Glu	Pro
			50			55					60				
Ile	Arg	Lys	Val	Pro	Val	Ser	Lys	Thr	Pro	Lys	Lys	Thr	His	Ser	Asp
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960

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<210> 4210

<211> 863

<212> PRT

<213> Homo sapiens

<400> 4210

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Ser	Arg	Pro	Glu	Arg	Pro	Asp	Leu	Val	Phe	Glu	Glu	Glu	Asp	Leu	Pro
			20				25						30		
Tyr	Glu	Glu	Glu	Ile	Met	Arg	Asn	Gln	Phe	Ser	Val	Lys	Cys	Trp	Leu
	35					40						45			
Arg	Tyr	Ile	Glu	Phe	Lys	Gln	Gly	Ala	Pro	Lys	Pro	Arg	Leu	Asn	Gln
	50				55						60				
Leu	Tyr	Glu	Arg	Ala	Leu	Lys	Leu	Leu	Pro	Cys	Ser	Tyr	Lys	Leu	Trp
65				70					75					80	
Tyr	Arg	Tyr	Leu	Lys	Ala	Arg	Arg	Ala	Gln	Val	Lys	His	Arg	Cys	Val
			85					90					95		
Thr	Asp	Pro	Ala	Tyr	Glu	Asp	Val	Asn	Asn	Cys	His	Glu	Arg	Ala	Phe
			100					105					110		
Val	Phe	Met	His	Lys	Met	Pro	Arg	Leu	Trp	Leu	Asp	Tyr	Cys	Gln	Phe
		115					120					125			
Leu	Met	Asp	Gln	Gly	Arg	Val	Thr	His	Thr	Arg	Arg	Thr	Phe	Asp	Arg
	130					135					140				
Ala	Leu	Arg	Ala	Leu	Pro	Ile	Thr	Gln	His	Ser	Arg	Ile	Trp	Pro	Leu
145				150						155				160	
Tyr	Leu	Arg	Phe	Leu	Arg	Ser	His	Pro	Leu	Pro	Glu	Thr	Ala	Val	Arg
			165						170					175	
Gly	Tyr	Arg	Arg	Phe	Leu	Lys	Leu	Ser	Pro	Glu	Ser	Ala	Glu	Glu	Tyr
			180					185					190		
Ile	Glu	Tyr	Leu	Lys	Ser	Ser	Asp	Arg	Leu	Asp	Glu	Ala	Ala	Gln	Arg
	195						200					205			
Leu	Ala	Thr	Val	Val	Asn	Asp	Glu	Arg	Phe	Val	Ser	Lys	Ala	Gly	Lys
	210					215					220				
Ser	Asn	Tyr	Gln	Leu	Trp	His	Glu	Leu	Cys	Asp	Leu	Ile	Ser	Gln	Asn
225				230						235				240	
Pro	Asp	Lys	Val	Gln	Ser	Leu	Asn	Val	Asp	Ala	Ile	Ile	Arg	Gly	Gly
			245						250					255	
Leu	Thr	Arg	Phe	Thr	Asp	Gln	Leu	Gly	Lys	Leu	Trp	Cys	Ser	Leu	Ala
		260						265					270		
Asp	Tyr	Tyr	Ile	Arg	Ser	Gly	His	Phe	Glu	Lys	Ala	Arg	Asp	Val	Tyr
	275					280						285			
Glu	Glu	Ala	Ile	Arg	Thr	Val	Met	Thr	Val	Arg	Asp	Phe	Thr	Gln	Val
	290					295					300				
Phe	Asp	Ser	Tyr	Ala	Gln	Phe	Glu	Glu	Ser	Met	Ile	Ala	Ala	Lys	Met
305				310						315				320	
Glu	Thr	Ala	Ser	Glu	Leu	Gly	Arg	Glu	Glu	Glu	Asp	Asp	Val	Asp	Leu
			325						330					335	
Glu	Leu	Arg	Leu	Ala	Arg	Phe	Glu	His	Leu	Ile	Ser	Arg	Arg	Pro	Leu

3407

770		775		780
Glu Gln Leu Ala Ala	Glu Ala Glu Arg Asp Gln Pro Leu Arg Ala Gln			
785	790	795		800
Ser Lys Ile Leu Phe Val Arg Ser Asp Ala Ser Arg Glu Glu Leu Ala				
	805	810		815
Glu Leu Ala Gln Gln Val Asn Pro Glu Glu Ile Gln Leu Gly Glu Asp				
	820	825		830
Glu Asp Glu Asp Glu Met Asp Leu Glu Pro Asn Glu Val Arg Leu Glu				
	835	840		845
Gln Gln Ser Val Pro Ala Ala Val Phe Gly Ser Leu Lys Glu Asp				
850	855	860		

<210> 4211
 <211> 456
 <212> DNA
 <213> Homo sapiens

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 180
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 240
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 360
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 456

<210> 4212
 <211> 81
 <212> PRT
 <213> Homo sapiens

<400> 4212
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 20 25 30
 Arg Ser Val Glu Arg Leu Phe Ser Ser Leu Arg Val Trp Lys Ser Ala
 35 40 45
 Leu Asp Pro Tyr Ser Arg Pro Arg Glu Ser Val Val Thr Lys Arg Arg
 50 55 60
 Arg Ala Arg Ala Phe Ile Phe Ser Ser Glu Lys Leu Gly Ala Ser Asp
 65 70 75 80
 Pro

<210> 4213
<211> 383
<212> DNA
<213> Homo sapiens

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240
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360
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383

<210> 4214
<211> 127
<212> PRT
<213> Homo sapiens

<400> 4214
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Leu Asp Asp Tyr Met Glu Ala Arg Glu Gly Met His Leu Lys Asn Val
20 25 30
Asp Phe Arg Glu Phe Met Val Ala Phe Pro Asp Pro Ala Arg Pro Pro
35 40 45
Trp Tyr Ala Cys Ser Ser Ala Phe Trp Ala Ala Ala Leu Leu Thr Leu
50 55 60
Ser Trp Pro Leu Arg Val Leu Ala Glu Tyr Arg Thr Ala Tyr Ala His
65 70 75 80
Tyr His Val Glu Lys Leu Phe Gly Leu Glu Gly Pro Gly Ser Ala Ser
85 90 95
Ser Ala Gly Gly Gly Leu Ser Pro Ser Asp Glu Leu Leu Pro Pro Leu
100 105 110
Thr His Arg Leu Pro Arg Val Asn Thr Val Asp Ser Thr Glu Leu
115 120 125

<210> 4215
<211> 939
<212> DNA
<213> Homo sapiens

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120

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 360
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<210> 4216

<211> 287

<212> PRT

<213> Homo sapiens

<400> 4216

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Leu	Glu	Ser	Thr	Asn	Thr	Glu	Lys	Glu	Thr	Ser	Leu	Glu	Glu	Thr	Lys	20	25	30	
Ile	Gly	Glu	Ile	Leu	Ile	Gln	Gly	Leu	Thr	Glu	Asp	Met	Val	Thr	Val	35	40	45	
Leu	Ile	Arg	Ala	Cys	Val	Ser	Met	Leu	Gly	Val	Pro	Val	Asp	Pro	Asp	50	55	60	
Thr	Leu	His	Ala	Thr	Leu	Cys	Phe	Cys	Leu	Arg	Val	Thr	Arg	Gly	Pro	65	70	75	80
Gln	Leu	Ala	Met	Met	Phe	Ala	Glu	Leu	Lys	Asn	Thr	Arg	Met	Ile	Leu	85	90	95	
Asn	Leu	Thr	Gln	Ser	Ser	Gly	Phe	Asn	Gly	Phe	Thr	Pro	Leu	Val	Thr	100	105	110	
Leu	Leu	Leu	Arg	His	Ile	Ile	Glu	Asp	Pro	Cys	Thr	Leu	Arg	His	Thr	115	120	125	
Met	Glu	Lys	Val	Val	Arg	Ser	Ala	Ala	Thr	Ser	Gly	Ala	Gly	Ser	Thr	130	135	140	
Thr	Ser	Gly	Val	Val	Ser	Gly	Ser	Leu	Gly	Ser	Arg	Glu	Ile	Asn	Tyr				

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165 170 175
Thr Glu Val Ala Asn Cys Cys Ile Arg Ile Ala Leu Pro Ala Pro Arg
180 185 190
Gly Ser Gly Thr Ala Ser Asp Asp Glu Phe Glu Asn Leu Arg Ile Lys
195 200 205
Gly Pro Asn Ala Val Gln Leu Val Lys Thr Thr Pro Leu Lys Pro Ser
210 215 220
Pro Leu Pro Val Ile Pro Asp Thr Ile Lys Glu Val Ile Tyr Asp Met
225 230 235 240
Leu Asn Ala Leu Ala Ala Tyr His Ala Pro Glu Glu Ala Asp Lys Ser
245 250 255
Asp Pro Lys Pro Gly Val Met Thr Gln Glu Val Gly Gln Leu Leu Gln
260 265 270Met Gly Asp Asp
Val Tyr Gln Gln Tyr Arg Ser Leu Thr Arg
275 280 285

<210> 4217
<211> 619
<212> DNA
<213> Homo sapiens

<400> 4217
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619

<210> 4218
<211> 155
<212> PRT
<213> Homo sapiens

<400> 4218
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			20					25					30				
Gly	Pro	Gln	Arg	Cys	Leu	Ser	Leu	Cys	Pro	Cys	Leu	Leu	Ser	Arg	Thr		
		35					40					45					
His	Thr	His	Thr	Ser	Gln	Pro	Gln	Ala	His	Gln	Ser	Leu	Ser	Val	Ser		
	50					55					60						
Leu	Ser	Leu	Ser	Leu	Ser	Leu	Thr	His	Ile	His	Leu	Ser	His	Arg	Pro		
65					70					75					80		
Thr	Arg	Val	Ser	Leu	Leu	Val	Pro	Gly	Ser	Ser	Leu	Ser	His	Thr	Pro		
			85					90					95				
Thr	His	Thr	His	Thr	Ala	Gln	Pro	Gln	Ala	His	Glu	Gly	Val	Ser	Leu		
			100					105					110				
Ser	Leu	Ser	Leu	Ser	His	Thr	His	Thr	His	Thr	His	Thr	Pro	Val	Gln		
		115				120						125					
Leu	His	Arg	Gly	Leu	Gly	Gln	Glu	Thr	Asp	Leu	Asn	Thr	His	Thr	Thr		
	130					135					140						
Leu	Cys	Cys	Glu	Trp	Pro	Leu	Pro	Ser	Asn	Asn							
145					150					155							

<210> 4219

<211> 774

<212> DNA

<213> Homo sapiens

<400> 4219

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120
ggccatgggg aagacggccc tgttctacca cagcggcggc agcagcggct acgagagcgt
180
gatgcgggac agcagaggcca ccggcagcgc gtcctcggcg caggactcca cgagcgagaa
240
cagcagctcc gtgggcggca ggtgccggag cctcaagacc ccgaagaaac gctccaatcc
300
aggttctcag agacggaggc ttatcccagc actatccctg gacaccttt cccctgtgag
360
aaaaccccc aacagcacag gcgtccgctg ggtggatggn nccccttgcg gagcagcccg
420
aggggccttg gggaaccttt gagattaaag tctnatgaaa tcgatgacgt ggagcgcctg
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540
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600
gagctggagg cgaccaaaca gtatctgatg ctggatccca acaagtggct cagtgaattt
660
gacttggagc aggtttggga gctggattcc ctggagtacc tggaggcact ggagtgtgtg
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774

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<210> 4220

<211> 258
 <212> PRT
 <213> Homo sapiens

<400> 4220
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 20 25 30
 Arg Ala Glu Arg Gly Ala Pro Ala Gly His Gly Glu Asp Gly Pro Val
 35 40 45
 Leu Pro Gln Arg Arg Gln Gln Arg Leu Arg Glu Arg Asp Ala Gly Gln
 50 55 60
 Arg Gly His Arg Gln Arg Val Leu Gly Ala Gly Leu His Glu Arg Glu
 65 70 75 80
 Gln Gln Leu Arg Gly Arg Gln Val Pro Glu Pro Gln Asp Pro Glu Glu
 85 90 95
 Thr Leu Gln Ser Arg Phe Ser Glu Thr Glu Ala Tyr Pro Ser Thr Ile
 100 105 110
 Pro Gly His Leu Phe Pro Cys Glu Lys Thr Pro Gln Gln His Arg Arg
 115 120 125
 Pro Leu Gly Gly Trp Xaa Pro Leu Arg Ser Ser Pro Arg Gly Leu Gly
 130 135 140
 Glu Pro Leu Arg Leu Lys Ser Xaa Glu Ile Asp Asp Val Glu Arg Leu
 145 150 155 160
 Gln Arg Arg Arg Gly Gly Ala Ser Lys Glu Ala Met Cys Phe Asn Ala
 165 170 175
 Lys Leu Lys Ile Leu Glu His Arg Gln Gln Arg Ile Ala Glu Val Arg
 180 185 190
 Ala Lys Tyr Glu Trp Leu Met Lys Glu Leu Glu Ala Thr Lys Gln Tyr
 195 200 205
 Leu Met Leu Asp Pro Asn Lys Trp Leu Ser Glu Phe Asp Leu Glu Gln
 210 215 220
 Val Trp Glu Leu Asp Ser Leu Glu Tyr Leu Glu Ala Leu Glu Cys Val
 225 230 235 240
 Thr Glu Arg Leu Glu Ser Arg Val Asn Phe Cys Lys Ala His Leu Met
 245 250 255
 Met Leu

<210> 4221
 <211> 789
 <212> DNA
 <213> Homo sapiens

<400> 4221
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 120
 gaagcttcaa actgtataaa tttaaagtga tttgcatatt ataaaaataa agataaacat
 180
 atacatattt tacactagtt atggaacagc aatgaacgtc agtcgatccc tctttcacat
 240

ttaacagaac tgaaatctga gtgctctaaa tactgccacc tgtactgtaa ctatggctta
 300
 tatgtgcacg gaaaacaaaa tccctgagaa gccattcgac tttttttttt tttcttttct
 360
 tcaagtagcg cgctccttgg aggatcacag ttctgaggtt caggttgtaa aacatttgct
 420
 ccatgttctc gtccatgctt cccccacca cccctcccc acctcttccc cagtcgtcca
 480
 aaaagcacc tgcaagcacg cgttgtcact caagttcaca gaacacgctg gggtgagtgc
 540
 agagggctctg ccaggtgcaa aagatgggtcc aggtgttcag atgctctctt ttctccatgg
 600
 aaattccaca gccacaaacg tcaactgggtt ctgtgctttt caccaacatt cttcccttaa
 660
 aaattgggtgc tcctaaagtc acagtttggg tacagtaaaa atgatggcat aaggaaaaga
 720
 agcactatct tttccactta attttccaag aaagtatgaa gatacttgga acaggggctg
 780
 atcacagtc
 789

<210> 4222

<211> 127

<212> PRT

<213> Homo sapiens

<400> 4222

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Phe	Phe	Phe	Phe	Ser	Phe	Leu	Gln	Val	Ala	Arg	Ser	Leu	Glu	Asp	His
			20					25					30		
Ser	Ser	Glu	Val	Gln	Val	Val	Lys	His	Leu	Leu	His	Val	Leu	Val	His
		35					40					45			
Ala	Ser	Pro	His	His	Pro	Leu	Pro	Thr	Ser	Ser	Pro	Val	Val	Gln	Lys
	50					55					60				
Ala	Pro	Cys	Lys	His	Ala	Leu	Ser	Leu	Lys	Phe	Thr	Glu	His	Ala	Gly
65					70					75				80	
Val	Ser	Ala	Glu	Gly	Leu	Pro	Gly	Ala	Lys	Asp	Gly	Pro	Gly	Val	Gln
			85						90					95	
Met	Leu	Ser	Phe	Leu	His	Gly	Asn	Ser	Thr	Ala	Thr	Asn	Val	Thr	Gly
			100					105					110		
Phe	Cys	Ala	Phe	His	Gln	His	Ser	Ser	Leu	Lys	Asn	Trp	Cys	Ser	
		115					120					125			

<210> 4223

<211> 852

<212> DNA

<213> Homo sapiens

<400> 4223

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 120

ctggtttact acaaccggct gaagaactcg aagattgtca tcagtgactt ccatctggct
180
aagctagaaa atggcctcat caaggagccc tgtgggaccc ccgaagattt tgcccccaa
240
ggggaaggcc ggcagcggta tggacgccct gtggactgct gggccattgg agtcatcatg
300
tacatcctgc tttcaggcaa tccacctttc tatgaggagg tggaagaaga tgattatgag
360
aaccatgata agaattctctt ccgcaagatc ctggctgggtg actatgagtt tgactctcca
420
tattgggatg atatttcgca ggcagccaaa gacctgggtca caaggctgat ggaggtggag
480
caagaccagc ggatcactgc agaagaggcc atctcccatg agtggatttc tggcaatgct
540
gcttctgata agaacatcaa ggatgggtgtc tgtgccccaga ttgaaaagaa ctttgccagg
600
gccaaagtga agaaggctgt ccgagtgacc accctcatga aacggctccg ggcaccagag
660
cagtccagca cggtgcagc ccagtcggcc tcagccacag aactgccac ccccggggct
720
gcagaccgta gtgccacccc agccacagat ggaagtgcc cccagccac tgatggcagt
780
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840
actgacagga gc
852

<210> 4224

<211> 284

<212> PRT

<213> Homo sapiens

<400> 4224

Ile	Leu	Asp	Gln	Gly	Tyr	Tyr	Ser	Glu	Arg	Asp	Thr	Ser	Asn	Val	Val
1				5				10					15		
Arg	Gln	Val	Leu	Glu	Ala	Val	Ala	Tyr	Leu	His	Ser	Leu	Lys	Ile	Val
			20					25					30		
His	Arg	Asn	Leu	Lys	Leu	Glu	Asn	Leu	Val	Tyr	Tyr	Asn	Arg	Leu	Lys
			35				40					45			
Asn	Ser	Lys	Ile	Val	Ile	Ser	Asp	Phe	His	Leu	Ala	Lys	Leu	Glu	Asn
		50					55				60				
Gly	Leu	Ile	Lys	Glu	Pro	Cys	Gly	Thr	Pro	Glu	Asp	Phe	Ala	Pro	Gln
65						70				75				80	
Gly	Glu	Gly	Arg	Gln	Arg	Tyr	Gly	Arg	Pro	Val	Asp	Cys	Trp	Ala	Ile
			85					90						95	
Gly	Val	Ile	Met	Tyr	Ile	Leu	Leu	Ser	Gly	Asn	Pro	Pro	Phe	Tyr	Glu
			100					105					110		
Glu	Val	Glu	Glu	Asp	Asp	Tyr	Glu	Asn	His	Asp	Lys	Asn	Leu	Phe	Arg
		115					120					125			
Lys	Ile	Leu	Ala	Gly	Asp	Tyr	Glu	Phe	Asp	Ser	Pro	Tyr	Trp	Asp	Asp
		130				135					140				
Ile	Ser	Gln	Ala	Ala	Lys	Asp	Leu	Val	Thr	Arg	Leu	Met	Glu	Val	Glu
145					150				155					160	
Gln	Asp	Gln	Arg	Ile	Thr	Ala	Glu	Glu	Ala	Ile	Ser	His	Glu	Trp	Ile

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<400> 4226
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Ala Asn Asp Asn Thr Pro Thr Phe Pro Glu Ile Ser Tyr Asp Val Tyr
      20                    25                    30
Val Tyr Thr Asp Met Arg Pro Gly Asp Arg Val Leu Gln Leu Thr Ala
      35                    40                    45
Val Asp Ala Asp Glu Gly Ser Asn Gly Glu Ile Thr Tyr Glu Ile Leu
      50                    55                    60
Val Gly Ala Gln Gly Asp Phe Ile Ile Asn Lys Thr Thr Gly Leu Ile

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65	Thr	Ile	Ala	Pro	Gly	Val	Glu	Met	Ile	Val	Gly	Arg	Thr	Tyr	Ala	Leu
				85						90					95	
Pro	Val	Gln	Ala	Ala	Asp	Asn	Ala	Pro	Pro	Ala	Lys	Gln	Arg	Thr	Pro	
			100					105						110		
Ile	Cys	Thr	Val	Tyr	Ile	Glu	Val	Leu	Pro	Pro	Asn	Asn	Gln	Ser	Pro	
		115						120					125			
Pro	Arg	Phe	Pro	Gln	Leu	Met	Tyr	Ser	Leu	Glu	Ile	Ser	Glu	Ala	Met	
								135					140			
Arg	Val	Gly	Ala	Val	Leu	Leu	Asn	Leu	Gln	Ala	Thr					
145					150					155						

<210>²⁴4227 Set Set

<211> 1199 -

<212>-DNA-Pre sin

<213> Homo sapiens

(213) Homo sapiens
A. J. A. G. G. G. G. G. G.

<400> 4227

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attat⁹⁰aaaatt¹⁰⁰-¹¹⁰taactt¹²⁰ctaa catgttttat ggtaa¹³⁰aaatt gtactttttt cctttagcga

120
cattcaaatg catcacaaac actttgtgaa attgttcgcc tgagcagaga ccagatgtta
180

180
caaatcaga¹⁸⁰acagta¹⁸⁰caga¹⁸⁰ gcccgacccc¹⁸⁰ ctgcttgcca¹⁸⁰ ctctagaaaa¹⁸⁰ gcaagaaatt¹⁸⁰
240

240
atagagcagc ttctatcaaa tattttccac aaggagaaaa atgagtcagc catagtcagt

300
gcaatccaga tattgctgac ttacttgag acacgacgac caacatttga aggccatata

gagatctgcc caccaggcat gagccattca gcttgttcag taaacaagag tgttctagaa

420
g c c a t c a g a g g a a g a c t t g g a t c t t t t c a t g a a c t c c t g c t g g a g c c a c c c a a q a a a a g t

480 qtqatqaaga ccacatgggg ttgtctggat cctcctgtgg ggaatacccg gttgaatgac

540 attaggttgaatattccagcct gcttcaaacc aataccagca gtataaatgg ggacgttato

attaggttga tatccagcct gcttcaaacc aataccagca gtataaatgg ggaccttatg
600
gagctgaatg gcttgaatg gcttgaatg gcttgaatg gcttgaatg gcttgaatg

gagctgaata gcattggagt catattgaac atgtttcttca agtatacatg gaataacttt
660 450

ttgcatacat aagtggaaat ttgtattgca ctgattcttg caagtccttt tgaaaacaca
720 495

Leu Gly Glu Val His His Leu

gaaaatgcca caattaccga tcaagactcc actggtgata atttggttatt aaaacatctt
780 510

ttccaaaaat gtcaattaat agaacgaata cttgaagcct gggaaatgaa tgagaagaaa
840

caggctgagg gaggaagacg gcatgggtac atgggacacc taacgaggat agctaactgt
900

950
atcgtgcaca gcactgacaa gggccccaac agtgcattag tgcagcagct tatcaaaggt
960

980
aagttatttg tgaaattga attacatttt tgttgggttg caggaaggat ttaaggggtca
1020

1020
agtagaaatg catgtagcat ttttaatagt gatttgtggg acttctttat atttggcaaa
1080

ttatgtattt gaatgaggtt cttgagaatg tgtttgaaca gggttgtttt ttgggttgta
 1140
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 1199

<210> 4228

<211> 298

<212> PRT

<213> Homo sapiens

<400> 4228

Arg	His	Ser	Asn	Ala	Ser	Gln	Ser	Leu	Cys	Glu	Ile	Val	Arg	Leu	Ser	1	5	10	15
Arg	Asp	Gln	Met	Leu	Gln	Ile	Gln	Asn	Ser	Thr	Glu	Pro	Asp	Pro	Leu	20	25	30	
Leu	Ala	Thr	Leu	Glu	Lys	Gln	Glu	Ile	Ile	Glu	Gln	Leu	Leu	Ser	Asn	35	40	45	
Ile	Phe	His	Lys	Glu	Lys	Asn	Glu	Ser	Ala	Ile	Val	Ser	Ala	Ile	Gln	50	55	60	
Ile	Leu	Leu	Thr	Leu	Leu	Glu	Thr	Arg	Arg	Pro	Thr	Phe	Glu	Gly	His	65	70	75	80
Ile	Glu	Ile	Cys	Pro	Pro	Gly	Met	Ser	His	Ser	Ala	Cys	Ser	Val	Asn	85	90	95	
Lys	Ser	Val	Leu	Glu	Ala	Ile	Arg	Gly	Arg	Leu	Gly	Ser	Phe	His	Glu	100	105	110	
Leu	Leu	Leu	Glu	Pro	Pro	Lys	Lys	Ser	Val	Met	Lys	Thr	Thr	Trp	Gly	115	120	125	
Val	Leu	Asp	Pro	Pro	Val	Gly	Asn	Thr	Arg	Leu	Asn	Val	Ile	Arg	Leu	130	135	140	
Ile	Ser	Ser	Leu	Leu	Gln	Thr	Asn	Thr	Ser	Ser	Ile	Asn	Gly	Asp	Leu	145	150	155	160
Met	Glu	Leu	Asn	Ser	Ile	Gly	Val	Ile	Leu	Asn	Met	Phe	Phe	Lys	Tyr	165	170	175	
Thr	Trp	Asn	Asn	Phe	Leu	His	Thr	Gln	Val	Glu	Ile	Cys	Ile	Ala	Leu	180	185	190	
Ile	Leu	Ala	Ser	Pro	Phe	Glu	Asn	Thr	Glu	Asn	Ala	Thr	Ile	Thr	Asp	195	200	205	
Gln	Asp	Ser	Thr	Gly	Asp	Asn	Leu	Leu	Leu	Lys	His	Leu	Phe	Gln	Lys	210	215	220	
Cys	Gln	Leu	Ile	Glu	Arg	Ile	Leu	Glu	Ala	Trp	Glu	Met	Asn	Glu	Lys	225	230	235	240
Lys	Gln	Ala	Glu	Gly	Gly	Arg	Arg	His	Gly	Tyr	Met	Gly	His	Leu	Thr	245	250	255	
Arg	Ile	Ala	Asn	Cys	Ile	Val	His	Ser	Thr	Asp	Lys	Gly	Pro	Asn	Ser	260	265	270	
Ala	Leu	Val	Gln	Gln	Leu	Ile	Lys	Gly	Lys	Leu	Phe	Val	Lys	Phe	Glu	275	280	285	
Leu	His	Phe	Cys	Trp	Val	Ala	Gly	Arg	Ile							290	295		

<210> 4229

<211> 1612

<212> DNA

<213> Homo sapiens

<400> 4229

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120
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180
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240
ctgagccaag gccagtggat ggggctcccc gacctggagg tcaaggactg gatgcagaag
300
aagcgaagag gtcttcgcaa cagccgggcc actgccgggg acatcgccca ctactacagg
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420
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480
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600
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720
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780
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900
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1020
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1080
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1320
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<210> 4230

<211> 417

<212> PRT

<213> Homo sapiens

<400> 4230

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Leu	Glu	Gly	Arg	Ser	Gln	Ser	Pro	Val	Ala	Leu	Leu	Phe	Asp	Ala	Leu
			20					25					30		
Leu	Arg	Pro	Asp	Thr	Asp	Phe	Gly	Gly	Asn	Met	Lys	Ser	Val	Leu	Thr
		35					40					45			
Trp	Lys	His	Arg	Lys	Glu	His	Ala	Ile	Pro	His	Val	Val	Leu	Gly	Arg
	50					55					60				
Asn	Leu	Pro	Gly	Gly	Ala	Trp	His	Ser	Ile	Glu	Gly	Ser	Met	Val	Ile
65					70					75					80
Leu	Ser	Gln	Gly	Gln	Trp	Met	Gly	Leu	Pro	Asp	Leu	Glu	Val	Lys	Asp
			85						90					95	
Trp	Met	Gln	Lys	Lys	Arg	Arg	Gly	Leu	Arg	Asn	Ser	Arg	Ala	Thr	Ala
			100					105					110		
Gly	Asp	Ile	Ala	His	Tyr	Tyr	Arg	Asp	Tyr	Val	Val	Lys	Lys	Gly	Leu
		115					120					125			
Gly	His	Asn	Phe	Val	Ser	Gly	Ala	Val	Val	Thr	Ala	Val	Glu	Trp	Gly
	130					135					140				
Thr	Pro	Asp	Pro	Ser	Ser	Cys	Gly	Ala	Gln	Asp	Ser	Ser	Pro	Leu	Phe
145					150					155					160
Gln	Val	Ser	Gly	Phe	Leu	Thr	Arg	Asn	Gln	Ala	Gln	Gln	Pro	Phe	Ser
			165						170					175	
Leu	Trp	Ala	Arg	Asn	Val	Val	Leu	Ala	Thr	Gly	Thr	Phe	Asp	Ser	Pro
			180					185					190		
Ala	Arg	Leu	Gly	Ile	Pro	Gly	Glu	Ala	Leu	Pro	Phe	Ile	His	His	Glu
	195						200					205			
Leu	Ser	Ala	Leu	Glu	Ala	Ala	Thr	Arg	Val	Gly	Ala	Val	Thr	Pro	Ala
	210					215					220				
Ser	Asp	Pro	Val	Leu	Ile	Ile	Gly	Ala	Gly	Leu	Ser	Ala	Ala	Asp	Ala
225					230					235					240
Val	Leu	Tyr	Ala	Arg	His	Tyr	Asn	Ile	Pro	Val	Ile	His	Ala	Phe	Arg
			245						250					255	
Arg	Ala	Val	Asp	Asp	Pro	Gly	Leu	Val	Phe	Asn	Gln	Leu	Pro	Lys	Met
		260						265					270		
Leu	Tyr	Pro	Glu	Tyr	His	Lys	Val	His	Gln	Met	Met	Arg	Glu	Gln	Ser
	275						280					285			
Ile	Leu	Ser	Pro	Ser	Pro	Tyr	Glu	Gly	Tyr	Arg	Ser	Leu	Pro	Arg	His
	290					295					300				
Gln	Leu	Leu	Cys	Phe	Lys	Glu	Asp	Cys	Gln	Ala	Val	Phe	Gln	Asp	Leu
305					310					315					320
Glu	Gly	Val	Glu	Lys	Val	Phe	Gly	Val	Ser	Leu	Val	Leu	Val	Leu	Ile
			325						330				335		
Gly	Ser	His	Pro	Asp	Leu	Ser	Phe	Leu	Pro	Gly	Ala	Gly	Ala	Asp	Phe
		340						345					350		
Ala	Val	Asp	Pro	Asp	Gln	Pro	Leu	Ser	Ala	Lys	Arg	Asn	Pro	Ile	Asp

	355		360		365										
Val	Asp	Pro	Phe	Thr	Tyr	Gln	Ser	Thr	Arg	Gln	Glu	Gly	Leu	Tyr	Ala
	370					375					380				
Met	Gly	Pro	Leu	Ala	Gly	Asp	Asn	Phe	Val	Arg	Phe	Val	Gln	Gly	Gly
385					390					395				400	
Ala	Leu	Ala	Val	Ala	Ser	Ser	Leu	Leu	Arg	Lys	Glu	Thr	Arg	Lys	Pro
				405					410					415	
Pro															

<210> 4231

<211> 1588

<212> DNA

<213> Homo sapiens

<400> 4231

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 120
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 <213> Homo sapiens

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 Gln Glu Met Phe Leu Glu Pro Asn Gln Gly Lys Lys Thr Lys Pro Pro
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 Phe Gly Arg Gln Ser Ser Ile Leu Asp Gln Gln Leu Ala Leu Asp Glu
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 Asn Ala Lys Leu Thr Gln Gln Leu Glu Glu Glu Arg Ile Gln His Gln
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 Lys Lys Glu Leu Glu Leu Lys Tyr Gln Asn Ser Glu Glu Lys Ala Arg
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 Pro Pro Pro Asn Pro Ile Arg Ser Leu Met Ser Met Ile Arg Lys Arg

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<211> 833

<212> PRT

<213> Homo sapiens

<400> 4234

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Lys Ser Leu Arg Ala Ser Phe His Asn Leu Ser Arg Gly Glu Ala Asn
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Ile	His	Ser	Ser	Leu	Ala	Pro	Pro	Ser	Gly	His	Met	Leu	Gly	Asn	Glu				
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<211> 971

<212> DNA

<213> Homo sapiens

<400> 4235

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 <213> Homo sapiens

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2640
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3127

<210> 4240

<211> 860

<212> PRT

<213> Homo sapiens

<400> 4240

Met Thr Glu Gly Thr Lys Lys Thr Ser Lys Lys Phe Lys Phe Phe Lys

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 Arg Arg Ser Ser Ala Ser Ile Ser Arg Gln Ser His Leu Glu Pro Asp
 35 40 45
 Thr Phe Glu Ala Thr Gln Asp Asp Met Val Thr Val Pro Lys Ser Pro
 50 55 60
 Pro Ala Tyr Ala Arg Ser Ser Asp Met Tyr Ser His Met Gly Thr Met
 65 70 75 80
 Pro Arg Pro Ser Ile Lys Lys Ala Gln Asn Ser Gln Ala Ala Arg Gln
 85 90 95
 Ala Gln Glu Ala Gly Pro Lys Pro Asn Leu Val Pro Gly Gly Val Pro
 100 105 110
 Asp Pro Pro Gly Leu Glu Ala Ala Lys Glu Val Met Val Lys Ala Thr
 115 120 125
 Gly Pro Leu Glu Asp Thr Pro Ala Met Glu Pro Asn Pro Ser Ala Val
 130 135 140
 Glu Val Asp Pro Ile Arg Lys Pro Glu Val Pro Thr Gly Asp Val Glu
 145 150 155 160
 Glu Glu Arg Pro Pro Arg Asp Val His Ser Glu Arg Ala Ala Gly Glu
 165 170 175
 Pro Glu Ala Gly Ser Asp Tyr Val Lys Phe Ser Lys Glu Lys Tyr Ile
 180 185 190
 Leu Asp Ser Ser Pro Glu Lys Leu His Lys Glu Leu Glu Glu Glu Leu
 195 200 205
 Lys Leu Ser Ser Thr Asp Leu Arg Ser His Ala Trp Tyr His Gly Arg
 210 215 220
 Ile Pro Arg Glu Val Ser Glu Thr Leu Val Gln Arg Asn Gly Asp Phe
 225 230 235 240
 Leu Ile Arg Asp Ser Leu Thr Ser Leu Gly Asp Tyr Val Leu Thr Cys
 245 250 255
 Arg Trp Arg Asn Gln Ala Leu His Phe Lys Ile Asn Lys Val Val Val
 260 265 270
 Lys Ala Gly Glu Ser Tyr Thr His Ile Gln Tyr Leu Phe Glu Gln Glu
 275 280 285
 Ser Phe Asp His Val Pro Ala Leu Val Arg Tyr His Val Gly Ser Arg
 290 295 300
 Lys Ala Val Ser Glu Gln Ser Gly Ala Ile Ile Tyr Cys Pro Val Asn
 305 310 315 320
 Arg Thr Phe Pro Leu Arg Tyr Leu Glu Ala Ser Tyr Gly Leu Gly Gln
 325 330 335
 Gly Ser Ser Lys Pro Ala Ser Pro Val Ser Pro Ser Gly Pro Lys Gly
 340 345 350
 Ser His Met Lys Arg Arg Ser Val Thr Met Thr Asp Gly Leu Thr Ala
 355 360 365
 Asp Lys Val Thr Arg Ser Asp Gly Cys Pro Thr Ser Thr Ser Leu Pro
 370 375 380
 Arg Pro Arg Asp Ser Ile Arg Ser Cys Ala Leu Ser Met Asp Gln Ile
 385 390 395 400
 Pro Asp Leu His Ser Pro Met Ser Pro Ile Ser Glu Ser Pro Ser Ser
 405 410 415
 Pro Ala Tyr Ser Thr Val Thr Arg Val His Ala Ala Pro Ala Ala Pro
 420 425 430
 Ser Ala Thr Ala Leu Pro Ala Ser Pro Val Ala Arg Cys Ser Ser Glu

435	440	445
Pro Gln Leu Cys Pro Gly Ser Ala Pro Lys Thr His Gly Glu Ser Asp		
450	455	460
Lys Gly Pro His Thr Ser Pro Ser His Thr Leu Gly Lys Ala Ser Pro		
465	470	475
Ser Pro Ser Leu Ser Ser Tyr Ser Asp Pro Asp Ser Gly His Tyr Cys		480
	485	490
Gln Leu Gln Pro Pro Val Arg Gly Ser Arg Glu Trp Ala Ala Thr Glu		495
	500	505
Thr Ser Ser Gln Gln Ala Arg Ser Tyr Gly Glu Arg Leu Lys Glu Leu		510
	515	520
Ser Glu Asn Gly Ala Pro Glu Gly Asp Trp Gly Lys Thr Phe Thr Val		525
530	535	540
Pro Ile Val Glu Val Thr Ser Ser Phe Asn Pro Ala Thr Phe Gln Ser		
545	550	555
Leu Leu Ile Pro Arg Asp Asn Arg Pro Leu Glu Val Gly Leu Leu Arg		560
	565	570
Lys Val Lys Glu Leu Leu Ala Glu Val Asp Ala Arg Thr Leu Ala Arg		575
	580	585
His Val Thr Lys Val Asp Cys Leu Val Ala Arg Ile Leu Gly Val Thr		590
	595	600
Lys Glu Met Gln Thr Leu Met Gly Val Arg Trp Gly Met Glu Leu Leu		605
610	615	620
Thr Leu Pro His Gly Arg Gln Leu Arg Leu Asp Leu Leu Glu Arg Phe		
625	630	635
His Thr Met Ser Ile Met Leu Ala Val Asp Ile Leu Gly Cys Thr Gly		640
	645	650
Ser Ala Glu Glu Arg Ala Ala Leu Leu His Lys Thr Ile Gln Leu Ala		655
	660	665
Ala Glu Leu Arg Gly Thr Met Gly Asn Met Phe Ser Phe Ala Ala Val		670
	675	680
Met Gly Ala Leu Asp Met Ala Gln Ile Ser Arg Leu Glu Gln Thr Trp		685
690	695	700
Val Thr Leu Arg Gln Arg His Thr Glu Gly Ala Ile Leu Tyr Glu Lys		
705	710	715
Lys Leu Lys Pro Phe Leu Lys Ser Leu Asn Glu Gly Lys Glu Gly Pro		720
	725	730
Pro Leu Ser Asn Thr Thr Phe Pro His Val Leu Pro Leu Ile Thr Leu		735
	740	745
Leu Glu Cys Asp Ser Ala Pro Pro Glu Gly Pro Glu Pro Trp Gly Ser		750
	755	760
Thr Glu His Gly Val Glu Val Val Leu Ala His Leu Glu Ala Ala Arg		765
	770	775
Thr Val Ala His His Gly Gly Leu Tyr His Thr Asn Ala Glu Val Lys		780
785	790	795
Leu Gln Gly Phe Gln Ala Arg Pro Glu Leu Leu Glu Val Phe Ser Thr		800
	805	810
Glu Phe Gln Met Arg Leu Leu Trp Gly Ser Gln Gly Ala Ser Ser Ser		815
	820	825
Gln Ala Arg Arg Tyr Glu Lys Phe Asp Lys Val Leu Thr Ala Leu Ser		830
	835	840
His Lys Leu Glu Pro Ala Val Arg Ser Ser Glu Leu		845
850	855	860

<210> 4241
 <211> 479
 <212> DNA
 <213> Homo sapiens

<400> 4241
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 180
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 300
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<210> 4242
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 4242
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 Cys Trp Lys Val Ser Pro His Ile Lys Met Asp Leu Leu Gln Trp Ile
 35 40 45
 Gln Ser Lys Thr Gln Ser Asp Gly Ser Thr Leu Gln Gln Gly Ser Leu
 50 55 60
 Glu Phe Phe Ser Cys Leu Tyr Glu Ile Gln Glu Glu Glu Phe Ile Gln
 65 70 75 80
 Gln Ala Leu Ser His Phe Gln Val Ile Val Val Ser Asn Ile Ala Ser
 85 90 95
 Lys Met Glu His Met Val Ser Ser Phe Cys Leu Lys Arg Cys Arg Ser
 100 105 110
 Ala Gln Val Leu His Leu Tyr Gly Ala Thr Tyr Ser Ala Asp Gly Glu
 115 120 125
 Asp Arg Ala Arg Cys Pro Gln Glu Arg Thr Arg Cys Trp Cys Ser Tyr
 130 135 140
 Gln Arg Gly Pro Phe Cys Trp Thr Pro Thr Val Asn Ile Trp Gln
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<210> 4243
 <211> 3159
 <212> DNA
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<400> 4243

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240
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300
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360
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420
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480
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<210> 4244
 <211> 849
 <212> PRT
 <213> Homo sapiens

<400> 4244

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			20					25					30		
Ala	Glu	Phe	Glu	Arg	Thr	Tyr	Val	Asp	Glu	Val	Asn	Ser	Glu	Leu	Val
		35					40					45			
Asn	Ile	Tyr	Thr	Phe	Asn	His	Thr	Val	Thr	Arg	Asn	Arg	Thr	Glu	Gly
	50					55					60				
Val	Arg	Val	Ser	Val	Asn	Val	Leu	Asn	Lys	Gln	Lys	Gly	Ala	Pro	Leu
65					70					75				80	
Leu	Phe	Val	Val	Arg	Gln	Lys	Glu	Ala	Val	Val	Ser	Phe	Gln	Val	Pro
			85						90					95	
Leu	Ile	Leu	Arg	Gly	Met	Phe	Gln	Arg	Lys	Tyr	Leu	Tyr	Gln	Lys	Val
			100					105					110		
Glu	Arg	Thr	Leu	Cys	Gln	Pro	Pro	Thr	Lys	Asn	Glu	Ser	Glu	Ile	Gln
		115						120					125		
Phe	Phe	Tyr	Val	Asp	Val	Ser	Thr	Leu	Ser	Pro	Val	Asn	Thr	Thr	Tyr
	130					135					140				
Gln	Leu	Arg	Val	Ser	Arg	Met	Asp	Asp	Phe	Val	Leu	Arg	Thr	Gly	Glu
145					150					155				160	
Gln	Phe	Ser	Phe	Asn	Thr	Thr	Ala	Ala	Gln	Pro	Gln	Tyr	Phe	Lys	Tyr
			165						170					175	
Glu	Phe	Pro	Glu	Gly	Val	Asp	Ser	Val	Ile	Val	Lys	Val	Thr	Ser	Asn
		180						185					190		
Lys	Ala	Phe	Pro	Cys	Ser	Val	Ile	Ser	Ile	Gln	Asp	Val	Leu	Cys	Pro
	195					200						205			
Val	Tyr	Asp	Leu	Asp	Asn	Asn	Val	Ala	Phe	Ile	Gly	Met	Tyr	Gln	Thr
	210				215						220				
Met	Thr	Lys	Lys	Ala	Ala	Ile	Thr	Val	Gln	Arg	Lys	Asp	Phe	Pro	Ser
225					230					235				240	
Asn	Ser	Phe	Tyr	Val	Val	Val	Val	Val	Lys	Thr	Glu	Asp	Gln	Ala	Cys
			245						250					255	
Gly	Gly	Ser	Leu	Pro	Phe	Tyr	Pro	Phe	Ala	Glu	Asp	Glu	Pro	Val	Asp
		260						265					270		
Gln	Gly	His	Arg	Gln	Lys	Thr	Leu	Ser	Val	Leu	Val	Ser	Gln	Ala	Val
		275					280					285			
Thr	Ser	Glu	Ala	Tyr	Val	Ser	Gly	Met	Leu	Phe	Cys	Leu	Gly	Ile	Phe
	290					295					300				
Leu	Ser	Phe	Tyr	Leu	Leu	Thr	Val	Leu	Leu	Ala	Cys	Trp	Glu	Asn	Trp
305					310					315				320	
Arg	Gln	Lys	Lys	Lys	Thr	Leu	Leu	Val	Ala	Ile	Asp	Arg	Ala	Cys	Pro
			325						330					335	
Glu	Ser	Ala	Ser	Leu	Leu	Gly	His	Pro	Arg	Val	Leu	Ala	Asp	Ser	Phe
		340						345					350		
Pro	Gly	Ser	Ser	Pro	Tyr	Glu	Gly	Tyr	Asn	Tyr	Gly	Ser	Phe	Glu	Asn
	355					360					365				
Val	Ser	Gly	Ser	Thr	Asp	Gly	Leu	Val	Asp	Ser	Ala	Gly	Thr	Gly	Asp

370 375 380
 Leu Ser Tyr Gly Tyr Gln Gly His Asp Gln Phe Lys Arg Arg Leu Pro
 385 390 395 400
 Ser Gly Gln Met Arg Gln Leu Cys Ile Ala Met Gly Arg Ser Phe Glu
 405 410 415
 Pro Val Gly Thr Arg Pro Arg Val Asp Ser Met Ser Ser Val Glu Glu
 420 425 430
 Asp Asp Tyr Asp Thr Leu Thr Asp Ile Asp Ser Asp Lys Asn Val Ile
 435 440 445
 Arg Thr Lys Gln Tyr Leu Tyr Val Ala Asp Leu Ala Arg Lys Asp Lys
 450 455 460
 Arg Val Leu Arg Lys Lys Tyr Gln Ile Tyr Phe Trp Asn Ile Ala Thr
 465 470 475 480
 Ile Ala Val Phe Tyr Ala Leu Pro Val Val Gln Leu Val Ile Thr Tyr
 485 490 495
 Gln Thr Val Val Asn Val Thr Gly Asn Gln Asp Ile Cys Tyr Tyr Asn
 500 505 510
 Phe Leu Cys Ala His Pro Leu Gly Asn Leu Ser Ala Phe Asn Asn Ile
 515 520 525
 Leu Ser Asn Leu Gly Tyr Ile Leu Leu Gly Leu Leu Phe Leu Leu Ile
 530 535 540
 Ile Leu Gln Arg Glu Ile Asn His Asn Arg Ala Leu Leu Arg Asn Asp
 545 550 555 560
 Leu Cys Ala Leu Glu Cys Gly Ile Pro Lys His Phe Gly Leu Phe Tyr
 565 570 575
 Ala Met Gly Thr Ala Leu Met Met Glu Gly Leu Leu Ser Ala Cys Tyr
 580 585 590
 His Val Cys Pro Asn Tyr Thr Asn Phe Gln Phe Asp Thr Ser Phe Met
 595 600 605
 Tyr Met Ile Ala Gly Leu Cys Met Leu Lys Leu Tyr Gln Lys Arg His
 610 615 620
 Pro Asp Ile Asn Ala Ser Ala Tyr Ser Ala Tyr Ala Cys Leu Ala Ile
 625 630 635 640
 Val Ile Phe Phe Ser Val Leu Gly Val Val Phe Gly Lys Gly Asn Thr
 645 650 655
 Ala Phe Trp Ile Val Phe Ser Ile Ile His Ile Ile Ala Thr Leu Leu
 660 665 670
 Leu Ser Thr Gln Leu Tyr Tyr Met Gly Arg Trp Lys Leu Asp Ser Gly
 675 680 685
 Ile Phe Arg Arg Ile Leu His Val Leu Tyr Thr Asp Cys Ile Arg Gln
 690 695 700
 Cys Ser Gly Pro Leu Tyr Val Asp Arg Met Val Leu Leu Val Met Gly
 705 710 715 720
 Asn Val Ile Asn Trp Ser Leu Ala Ala Tyr Gly Leu Ile Met Arg Pro
 725 730 735
 Asn Asp Phe Ala Ser Tyr Leu Leu Ala Ile Gly Ile Cys Asn Leu Leu
 740 745 750
 Leu Tyr Phe Ala Phe Tyr Ile Ile Met Lys Leu Arg Ser Gly Glu Arg
 755 760 765
 Ile Lys Leu Ile Pro Leu Leu Cys Ile Val Cys Thr Ser Val Val Trp
 770 775 780
 Gly Phe Ala Leu Phe Phe Phe Phe Gln Gly Leu Ser Thr Trp Gln Lys
 785 790 795 800
 Thr Pro Ala Glu Ser Arg Glu His Asn Arg Asp Cys Ile Leu Leu Asp

				805					810					815					
Phe	Phe	Asp	Asp	His	Asp	Ile	Trp	His	Phe	Leu	Ser	Ser	Ile	Ala	Met				
			820					825					830						
Phe	Gly	Ser	Phe	Leu	Val	Ser	Gly	Pro	Pro	Gly	Ala	Ala	Leu	Arg	Ile				
		835					840						845						
Thr																			

<210> 4245
 <211> 909
 <212> DNA
 <213> Homo sapiens

<400> 4245
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<210> 4246
 <211> 303
 <212> PRT
 <213> Homo sapiens

<400> 4246
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Asn Ala Gly Glu Glu Cys Lys Ser Leu Arg Gly Gln Leu Glu Glu Gln			
35	40	45	
Gly Arg Gln Leu Gln Ala Ala Glu Glu Ala Val Glu Lys Leu Lys Ala			
50	55	60	
Thr Gln Ala Asp Met Gly Glu Lys Leu Ser Cys Thr Ser Asn His Leu			
65	70	75	80
Ala Glu Cys Gln Ala Ala Met Leu Arg Lys Asp Lys Glu Gly Ala Ala			
85	90	95	
Leu Arg Glu Asp Leu Glu Arg Thr Gln Lys Glu Leu Glu Lys Ala Thr			
100	105	110	
Thr Lys Ile Gln Glu Tyr Tyr Asn Lys Leu Cys Gln Glu Val Thr Asn			
115	120	125	
Arg Glu Arg Asn Asp Gln Lys Met Leu Ala Asp Leu Asp Asp Leu Asn			
130	135	140	
Arg Thr Lys Lys Tyr Leu Glu Glu Arg Leu Ile Glu Leu Leu Arg Asp			
145	150	155	160
Lys Asp Ala Leu Trp Gln Lys Ser Asp Ala Leu Glu Phe Gln Gln Lys			
165	170	175	
Leu Ser Ala Glu Glu Arg Trp Leu Gly Asp Thr Glu Ala Asn His Cys			
180	185	190	
Leu Asp Cys Lys Arg Glu Phe Ser Trp Met Val Arg Arg His His Cys			
195	200	205	
Arg Ile Cys Gly Arg Ile Phe Cys Tyr Tyr Cys Cys Asn Asn Tyr Val			
210	215	220	
Leu Ser Lys His Gly Gly Lys Lys Glu Arg Cys Cys Arg Ala Cys Phe			
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<211> 5755

<212> DNA

<213> Homo sapiens

<400> 4247

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 <212> PRT
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<400> 4248
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 Ala Arg Thr Pro Pro Ala Pro Asp Pro His Leu Gly Gly Arg His Thr
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 Thr Glu Arg Pro Ala Gly Arg Pro Gly Ala Pro Leu Val Arg Thr Gly
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 Pro Ala Leu Ser Pro Leu Ser Pro Arg Ala Val Ala Ser Gln Trp Pro
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 195 200 205
 Ala Gln Pro Pro Ile Thr Gln Glu Arg Gly Asp Ala Trp Ala Thr Ala

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Glu Glu Val Lys Ala Pro	Arg Ala Gly Gly Ser	Ala Ala Glu Asp Leu
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Arg Leu Pro Ser Thr Ser	Phe Ala Leu Thr Gly	Asp Ser Ala His Asn
	260	265
Gln Ala Met Val His Trp	Ser Gly His Asn Ser	Ser Val Ile Leu Ile
	275	280
Leu Thr Lys Leu Tyr Asp	Phe Asn Leu Gly Ser	Val Thr Glu Ser Ser
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Lys Val Gly Leu Lys Thr	Val Leu Ser Tyr Leu	Tyr Val Asn Pro Thr
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Asn Lys Arg Lys Ile Met	Leu Leu Ser Asp Pro	Glu Met Glu Ser Ser
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Ile Leu Ile Ser Ser Asp	Glu Gly Ala Thr Tyr	Gln Lys Tyr Arg Leu
	355	360
Thr Phe Tyr Ile Gln Ser	Leu Leu Phe His Pro	Lys Gln Glu Asp Trp
	370	375
Val Leu Ala Tyr Ser Leu	Asp Gln Lys Leu Tyr	Ser Ser Met Asp Phe
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Tyr Trp Ser Val Ala Gly	Leu Asp Lys Glu Ala	Asp Leu Val His Met
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Glu Val Arg Thr Thr Asp	Gly Tyr Ala His Tyr	Leu Thr Cys Arg Ile
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Gln Glu Cys Ala Glu Thr	Thr Arg Ser Gly Pro	Phe Ala Arg Ser Ile
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Asp Ile Ser Ser Leu Val	Val Gln Asp Glu Tyr	Ile Phe Ile Gln Val
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Phe Ala Gln Ile Lys Leu	Pro Lys Tyr Ser Leu	Pro Lys Asp Met His
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Ile Ile Ser Thr Asp Glu	Asn Gln Val Phe Ala	Ala Val Gln Glu Trp
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Asn Gln Asn Asp Thr Tyr	Asn Leu Tyr Ile Ser	Asp Thr Arg Gly Ile
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Tyr Phe Thr Leu Ala Met	Glu Asn Ile Lys Ser	Ser Arg Gly Leu Met
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Phe Leu Ala Asn Lys Lys	Val Asp Asp Gln Val	Lys Thr Tyr Ile Thr
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Tyr Asn Lys Gly Arg Asp	Trp Arg Leu Leu Gln	Ala Pro Asp Val Asp
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Leu Arg Gly Ser Pro Val	His Cys Leu Leu Pro	Phe Cys Ser Leu His
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Ser Lys Glu Thr Ala Pro	Gly Leu Val Val Ala	Thr Gly Asn Ile Gly

3446

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<211> 553

<212> DNA

<213> Homo sapiens

<400> 4249

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<211> 352

<212> PRT

<213> Homo sapiens

<400> 4252

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Phe Arg Leu Tyr Cys His Ala Pro Cys Met Ser Gly Tyr Leu Val Asp
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<210> 4253

<211> 1287

<212> DNA

<213> Homo sapiens

<400> 4253

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<210> 4254

<211> 114

<212> PRT

<213> Homo sapiens

<400> 4254

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Leu	Ala	His	Val	Ala	Cys	Ser	Gly	His	Gly	Met	Lys	Gln	Lys	Arg	Lys
			20					25					30		
Pro	Ala	Ser	Ser	Glu	Pro	Met	Pro	Glu	Asp	Ala	Leu	Gly	Gly	Ser	Ala
		35					40					45			
Val	Pro	Val	Arg	Phe	His	Leu	His	Pro	Glu	Gly	Leu	Leu	Trp	Cys	Ser
	50					55					60				
Arg	Cys	Phe	Phe	Ser	His	Gly	Pro	Lys	Gly	Ser	Glu	Pro	Pro	Gly	Arg
65					70				75					80	
Ser	Ala	Gly	Leu	Gln	Gly	Ala	Thr	Glu	Arg	Ser	Gly	Arg	Pro	Ser	Val
			85					90					95		
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<210> 4255
<211> 2205
<212> DNA
<213> Homo sapiens

<400> 4255
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<210> 4256

<211> 384

<212> PRT

<213> Homo sapiens

<400> 4256

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			20					25					30		
Gly	Val	Leu	Arg	Ile	Tyr	Ser	Gly	Ser	Leu	Met	Gly	Gln	Ala	Leu	Asp
		35					40					45			
Pro	Thr	Arg	Lys	Gln	Trp	Tyr	Leu	His	Ala	Val	Ala	Asn	Pro	Gly	Leu
	50					55					60				
Ile	Ser	Leu	Thr	Gly	Pro	Tyr	Leu	Asp	Val	Gly	Gly	Ala	Gly	Tyr	Val
65					70					75				80	
Val	Thr	Ile	Ser	His	Thr	Ile	His	Ser	Ser	Ser	Thr	Gln	Leu	Ser	Ser
			85					90					95		
Gly	His	Thr	Val	Ala	Val	Met	Gly	Ile	Asp	Phe	Thr	Leu	Arg	Tyr	Phe
			100					105					110		
Tyr	Lys	Val	Leu	Met	Asp	Leu	Leu	Pro	Val	Cys	Asn	Gln	Asp	Gly	Gly
		115					120					125			
Asn	Lys	Ile	Arg	Cys	Phe	Ile	Met	Glu	Asp	Arg	Gly	Tyr	Leu	Val	Ala
	130					135					140				
His	Pro	Thr	Leu	Ile	Asp	Pro	Lys	Gly	His	Ala	Pro	Val	Glu	Gln	Gln

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 Pro Asn Phe Val Lys Lys Asn Leu Cys Asn Ser Phe Ser Asp Arg Thr
 180 185 190
 Val Gln Arg Phe Tyr Lys Phe Asn Thr Ser Leu Ala Gly Asp Leu Thr
 195 200 205
 Asn Leu Val His Gly Ser His Cys Ser Lys Tyr Arg Leu Ala Arg Ile
 210 215 220
 Pro Gly Thr Asn Ala Phe Val Gly Ile Val Asn Glu Thr Cys Asp Ser
 225 230 235 240
 Leu Ala Phe Cys Ala Cys Ser Met Val Asp Arg Leu Cys Leu Asn Cys
 245 250 255
 His Arg Met Glu Gln Asn Glu Cys Glu Cys Pro Cys Glu Cys Pro Leu
 260 265 270
 Glu Val Asn Glu Cys Thr Gly Asn Leu Thr Asn Ala Glu Asn Arg Asn
 275 280 285
 Pro Ser Cys Glu Val His Gln Glu Pro Val Thr Tyr Thr Ala Ile Asp
 290 295 300
 Pro Gly Leu Gln Asp Ala Leu His Gln Cys Val Asn Ser Arg Cys Ser
 305 310 315 320
 Gln Arg Leu Glu Ser Gly Asp Cys Phe Gly Val Leu Asp Cys Glu Trp
 325 330 335
 Cys Met Val Asp Ser Asp Gly Lys Thr His Leu Asp Lys Pro Tyr Cys
 340 345 350
 Ala Pro Gln Lys Glu Cys Phe Gly Gly Ile Val Gly Ala Lys Ser Pro
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 Tyr Val Asp Asp Met Gly Ala Ile Gly Asp Glu Val Ile Thr Leu Lys
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<210> 4257

<211> 1541

<212> DNA

<213> Homo sapiens

<400> 4257

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 180
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<210> 4258

<211> 314

<212> PRT

<213> Homo sapiens

<400> 4258

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Asp	Gln	Ser	Pro	Gly	Lys	His	Met	Val	Thr	Met	Asp	Gly	Val	Arg	Glu
			20					25					30		
Glu	Asp	Leu	Ala	Pro	Phe	Ser	Leu	Arg	Lys	Arg	Trp	Glu	Ser	Glu	Pro
		35					40					45			
His	Pro	Tyr	Val	Phe	Phe	Asn	Asp	Asp	His	Thr	Thr	Met	Thr	Phe	Ile
		50				55					60				
Gly	Phe	His	Leu	Gln	Pro	Asn	Ile	Asn	Gly	Ser	Val	Asp	Ala	Ile	Ser
65				70					75					80	
His	Leu	Thr	Gly	Lys	Val	Ile	Lys	Arg	Asp	Val	Met	Thr	Arg	Asp	Leu
			85					90					95		
Tyr	Gln	Gly	Leu	Leu	Leu	Gln	Arg	Val	Pro	Phe	Asn	Val	Asp	Phe	Asp

				100						105					110				
Lys	Leu	Pro	Arg	His	Lys	Lys	Leu	Glu	Arg	Leu	Cys	Leu	Thr	Leu	Gly				
		115						120					125						
Ile	Pro	Gln	Ala	Thr	Asp	Pro	Asp	Lys	Thr	Tyr	Glu	Leu	Thr	Thr	Asp				
		130					135					140							
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Pro	Val	Ile	Ile	Met	Gly	Glu	Thr	Gly	Cys	Gly	Lys	Thr	Arg	Leu	Ile				
				165					170					175					
Lys	Phe	Leu	Ser	Asp	Leu	Arg	Arg	Gly	Gly	Thr	Asn	Ala	Asp	Thr	Ile				
			180					185					190						
Lys	Leu	Val	Lys	Val	His	Gly	Gly	Thr	Thr	Ala	Asp	Met	Ile	Tyr	Ser				
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Arg	Val	Arg	Glu	Ala	Glu	Asn	Val	Ala	Phe	Ala	Asn	Lys	Asp	Gln	His				
		210				215					220								
Gln	Leu	Asp	Thr	Ile	Leu	Phe	Phe	Asp	Glu	Ala	Asn	Thr	Thr	Glu	Ala				
225					230					235				240					
Ile	Ser	Cys	Ile	Lys	Glu	Val	Leu	Cys	Asp	His	Met	Val	Asp	Gly	Gln				
				245					250					255					
Pro	Leu	Ala	Glu	Asp	Ser	Gly	Leu	His	Ile	Ile	Ala	Ala	Cys	Asn	Pro				
		260					265					270							
Tyr	Pro	Glu	Asn	Ser	Glu	Glu	Met	Ile	Cys	Arg	Leu	Glu	Ser	Ala	Gly				
		275					280					285							
Leu	Gly	Tyr	Arg	Val	Ser	Met	Glu	Glu	Thr	Ala	Asp	Arg	Leu	Gly	Ser				
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Ile	Pro	Leu	Gly	Tyr	Thr	Cys	Thr	Gln	Arg										
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<210> 4259

<211> 377

<212> DNA

<213> Homo sapiens

<400> 4259

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120

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180

gccttctacg tccacaagtt cagagccatg ctgggcaaga accggctcat ctttccaggc
240

gagaaggtgc tcttggcgtg gtctgggggg ccttcgtcca gctccatggt ctggcaggtt
300

cttgagggcc tgagccaaga ttctgcaaaa agactgcgct ttgtggcagg agtcatcttt
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gttgacgagg gagcagc

377

<210> 4260

<211> 125

<212> PRT

<213> Homo sapiens

<400> 4260

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Glu Gln Lys Cys Val Lys Cys Lys Glu Ala Gln Pro Val Val Val Ile
          35           40           45
Arg Ala Gly Asp Ala Phe Cys Arg Asp Cys Phe Lys Ala Phe Tyr Val
          50           55           60
His Lys Phe Arg Ala Met Leu Gly Lys Asn Arg Leu Ile Phe Pro Gly
65           70           75           80
Glu Lys Val Leu Leu Ala Trp Ser Gly Gly Pro Ser Ser Ser Ser Met
          85           90           95
Val Trp Gln Val Leu Glu Gly Leu Ser Gln Asp Ser Ala Lys Arg Leu
          100          105          110
Arg Phe Val Ala Gly Val Ile Phe Val Asp Glu Gly Ala
          115          120          125

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<210> 4261

<211> 592

<212> DNA

<213> Homo sapiens

<400> 4261

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<210> 4262

<211> 156

<212> PRT

<213> Homo sapiens

<400> 4262

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His Met Phe Lys Asp Lys Gly Val Trp Gly Asn Lys Gln Asp His Arg

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Asn	Tyr	Leu	Arg	His	Gly	Gln	Leu	Ile	Val	Asn	Asp	Gly	Ile	Asn	Leu		
	50					55					60						
Leu	Gly	Val	Leu	Glu	Glu	Ala	Arg	Phe	Phe	Gly	Ile	Asp	Ser	Leu	Ile		
65					70					75					80		
Glu	His	Leu	Glu	Val	Ala	Ile	Lys	Asn	Ser	Gln	Pro	Pro	Glu	Asp	His		
			85						90					95			
Ser	Pro	Ile	Ser	Arg	Lys	Glu	Phe	Val	Arg	Phe	Leu	Leu	Ala	Thr	Pro		
		100					105						110				
Thr	Lys	Ser	Glu	Leu	Arg	Cys	Gln	Gly	Leu	Asn	Phe	Ser	Gly	Ala	Asp		
		115					120						125				
Leu	Ser	Arg	Leu	Asp	Leu	Arg	Tyr	Ile	Asn	Phe	Lys	Met	Ala	Asn	Leu		
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<210> 4263
 <211> 7710
 <212> DNA
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<211> 797

<212> PRT

<213> Homo sapiens

<400> 4264

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Ala	Asp	Ser	Ser	Ile	Phe	Pro	Arg	Val	Ile	Glu	Gly	Lys	Val	Asp	Gln
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Ile	Arg	Ala	Arg	Val	Glu	Arg	Asn	Ala	Val	Glu	Gly	Leu	Arg	Thr	Leu
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Cys	Val	Ala	Tyr	Lys	Arg	Leu	Ile	Gln	Glu	Glu	Tyr	Glu	Gly	Ile	Cys

3464

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<212> DNA

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<400> 4265

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<211> 613

<212> PRT

<213> Homo sapiens

<400> 4266

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<400> 4268

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588

<213> Homo sapiens

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<213> Homo sapiens

<400> 4273

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120
gagtaggtgc atgagtggat aaatgggtgg gtgggtaggt gaatagatgt atagatttat
180
aataggggga agggtaggatt ggtagatggg tagatggagg gatacattgc tgtgtggata
240
ggtgggtgaa tggatgaagg agggagggat gggcaggtag atggatagat tagtggatgg
300
atgggtggat gggctgacaa atggcttgtt cccagactgt ttgtccttgg gtggagtcac
360
gcaggtatct attgcagctg ggcctgaact gatattctgaa gagagaagtg gagacagcga
420
ccagacagat gaggatggag aacctggctc agaggcccag gccagggccc agccctttgg
480
cagcaaaaaa aagcgcctcc tctccgtcca cgacttcgac ttcgagggag actcagatga
540
ctccactcag cctcaaggtc actccctgca cctgtcctca gtccctgagg ccagggacag
600
cccacagtcc ctacacagatg agtcctgctc agagaaggca gcccctcaca aggctgaggg
660
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720
cagcatctca ccttccagac acggcgccct ggctgagctc tgcccgcctg gaggctccca
780
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840
agctgcccct gcagtacttg gccgatgtgg gacacctctg atgaggaaag catccgggct
900
cacgtgatgg cctcccacca ttccaagcgg agaggccggg cgtcttctga gagttagggg
960
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1020
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1080
ggacgaaaat gcagagccca acagggacaa atcagttggg cctctcccccc aggcggaccc
1140
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1200
gaccccgctc agtacaacag gaccacagat gaggagctgt cagagctgga ggacagagtg
1260
gcagtgacgg cctcagaagt ccagcaggca gagagcgagg ttccagacat tgaatccagg
1320
attgcagccc tgagggccgc agggctcacg gtgaagccct cgggaaagcc ccggaggaag
1380
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1440
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1560

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 1620
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 1680
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 1740
 actatacaca gtcaccgtcc caatgagaaa caagaaggag caccctccac atggactccc
 1800
 acctgcaagt ggacagcgac attcagtcct gcactgctca cctgggttta ctgatgactc
 1860
 ctggctgccc caccatcctc tctgatctgt gagaaacagc taagctgctg tgacttcctc
 1920
 ttaggacaat gttgtgtaaa tctttgaagg acacaccgaa gacctttata ctgtgatctt
 1980
 ttaccctttt cactcttggc tttcttatgt tgctttcatg aatggaatgg aaaaaagatg
 2040
 actcagttaa ggcaccaaaa aaaaaaaaaa aaaagtcgag c
 2081

<210> 4274

<211> 235

<212> PRT

<213> Homo sapiens

<400> 4274

Met	Ala	Leu	Gly	Lys	Leu	Leu	Leu	His	Ser	Gly	Arg	Met	Ser	Ser	Gly	1	5	10	15
Met	Ser	Ser	Cys	Pro	Cys	Ser	Thr	Trp	Pro	Met	Trp	Asp	Thr	Ser	Asp	20	25	30	
Glu	Glu	Ser	Ile	Arg	Ala	His	Val	Met	Ala	Ser	His	His	Ser	Lys	Arg	35	40	45	
Arg	Gly	Arg	Ala	Ser	Ser	Glu	Ser	Gln	Gly	Leu	Gly	Ala	Gly	Val	Arg	50	55	60	
Thr	Glu	Xaa	Asp	Val	Glu	Glu	Glu	Ala	Leu	Arg	Arg	Lys	Leu	Glu	Glu	65	70	75	80
Leu	Thr	Ser	Asn	Val	Ser	Asp	Gln	Glu	Thr	Phe	Val	Arg	Gly	Gly	Gly	85	90	95	
Ser	Gln	Gly	Arg	Lys	Cys	Arg	Ala	Gln	Gln	Gly	Gln	Ile	Ser	Trp	Ala	100	105	110	
Ser	Pro	Pro	Gly	Gly	Pro	Gly	Arg	Trp	His	Gly	Cys	Pro	Ser	Asn	Gln	115	120	125	
Gln	Thr	Gly	Lys	Lys	Pro	Gln	Asp	Pro	Gly	Asp	Pro	Val	Gln	Tyr	Asn	130	135	140	
Arg	Thr	Thr	Asp	Glu	Glu	Leu	Ser	Glu	Leu	Glu	Asp	Arg	Val	Ala	Val	145	150	155	160
Thr	Ala	Ser	Glu	Val	Gln	Gln	Ala	Glu	Ser	Glu	Val	Ser	Asp	Ile	Glu	165	170	175	
Ser	Arg	Ile	Ala	Ala	Leu	Arg	Ala	Ala	Gly	Leu	Thr	Val	Lys	Pro	Ser	180	185	190	
Gly	Lys	Pro	Arg	Arg	Lys	Ser	Asn	Leu	Pro	Ile	Phe	Leu	Pro	Arg	Val	195	200	205	
Ala	Gly	Lys	Leu	Gly	Lys	Arg	Pro	Glu	Asp	Pro	Asn	Ala	Asp	Pro	Ser	210	215	220	
Ser	Glu	Ala	Lys	Ala	Met	Ala	Val	Pro	Ile	Phe									

225

230

235

<210> 4275

<211> 874

<212> DNA

<213> Homo sapiens

<400> 4275

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 120
 ctcagtcgga agcctgtgtc catcgtgtcc ccggagccag ggaccaccgc tgacgtgctg
 180
 gagaccccag tcgacctggc cggatttcct gtgctgctga gcgacacggc tgggttgctg
 240
 gagggcgtgg ggcccgtgga gcaggagggc gtgcggcgcg cccgggagag gctagagcag
 300
 gctgacctca ttctggccat gctggatgct tctgacctgg cctctccctc cagttgcaac
 360
 ttcttgcca cgtcgtagc ctctgtggga gccagagcc ccagtgcag cagccagcgc
 420
 ctctcctgg tgctgaacaa gtcggacctg ctgtccccgg agggcccagg tcccggctct
 480
 gacctgccc cgcacctgct gctgtcctgt ctgacgggag aggggctgga cggcctcctg
 540
 gaggcgctga ggaaggagct agctgcagtg tgtggggacc cgtccacaga tccccgctg
 600
 ctgacccgag caaggcacca gcaccacctc cagggttgcc tggatgccct cggccactac
 660
 aagcagtcaa aagacctggc cctggcggca gaggcgctgc ggggtggccc gggtcacctg
 720
 acccggctca caggtggagg gggtagcgag gagatcctgg acatcatctt ccaggacttc
 780
 tgtgtgggca agtgacggga tccagggaat tcgcacccaa gctgcgtgga gaccagggag
 840
 cctcggggga tctggaaaca gtttaggcca attg
 874

<210> 4276

<211> 264

<212> PRT

<213> Homo sapiens

<400> 4276

Met	Gln	Val	Ala	Leu	Gly	Ala	His	Leu	Arg	Asp	Ala	Arg	Arg	Gly	Gln
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Arg	Leu	Arg	Ser	Gly	Ala	His	Val	Val	Val	Thr	Gly	Pro	Pro	Asn	Ala
			20					25					30		
Gly	Lys	Ser	Ser	Leu	Val	Asn	Leu	Leu	Ser	Arg	Lys	Pro	Val	Ser	Ile
		35				40					45				
Val	Ser	Pro	Glu	Pro	Gly	Thr	Thr	Arg	Asp	Val	Leu	Glu	Thr	Pro	Val
	50					55					60				
Asp	Leu	Ala	Gly	Phe	Pro	Val	Leu	Leu	Ser	Asp	Thr	Ala	Gly	Leu	Arg

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<210> 4277
<211> 1070
<212> DNA
<213> Homo sapiens
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120
aggaccaggc ccgcggggtc agctctcgcc gccagcgggc cgcagcattt ttgaaacgtt
180
ggggttgttg gagtggttgg attttccttg gaattgagtg agaaattcag aagactgaag
240
cccaggctta ctgtctacct ttcacggagg cctagccgtg agaggacaga agaaggcacg
300
tggcgaatca tgacagcgga caaagacaaa gacaaagaca aagagaagga ccgggaccga
360
gaccgggacc gagagagaga gaaaagagac aaagcaagag agagtgagaa ttcaaggcca
420
cgccggagct gtaccttggg aggaggagcc aaaaattatg ctgagagtga tcacagtga
480
gacgaggaca atgacaacaa tagtgccacc gcagaggagt ccacgaagaa gaataagaag
540
aaaccaccga aaaaaaagtc tcgttatgaa aggacagata ccggtgagat aacatcctac
600
atcactgaag atgatgtggt ctacagacca ggagactgtg tgtatatcga gagtcggagg
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<210> 4278
<211> 253
<212> PRT
<213> Homo sapiens
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<400> 4278
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          20          25          30
Glu Asn Ser Arg Pro Arg Arg Ser Cys Thr Leu Glu Gly Gly Ala Lys
          35          40          45
Asn Tyr Ala Glu Ser Asp His Ser Glu Asp Glu Asp Asn Asp Asn Asn
          50          55          60
Ser Ala Thr Ala Glu Glu Ser Thr Lys Lys Asn Lys Lys Lys Pro Pro
65          70          75          80
Lys Lys Lys Ser Arg Tyr Glu Arg Thr Asp Thr Gly Glu Ile Thr Ser
          85          90          95
Tyr Ile Thr Glu Asp Asp Val Val Tyr Arg Pro Gly Asp Cys Val Tyr
          100          105          110
Ile Glu Ser Arg Arg Pro Asn Thr Pro Tyr Phe Ile Cys Ser Ile Gln
          115          120          125
Asp Phe Lys Leu Val His Asn Ser Gln Ala Cys Cys Arg Ser Pro Thr
          130          135          140
Pro Ala Leu Cys Asp Pro Pro Ala Cys Ser Leu Pro Val Ala Ser Gln
145          150          155          160
Pro Pro Gln His Leu Ser Glu Ala Gly Arg Gly Pro Val Gly Ser Lys
          165          170          175
Arg Asp His Leu Leu Met Asn Val Lys Trp Tyr Tyr Arg Gln Ser Glu
          180          185          190
Val Pro Asp Ser Val Tyr Gln His Leu Val Gln Asp Arg His Asn Glu
          195          200          205
Asn Asp Ser Gly Arg Glu Leu Val Ile Thr Asp Pro Val Ile Lys Asn
          210          215          220
Arg Glu Leu Phe Ile Ser Asp Tyr Val Asp Thr Tyr His Ala Ala Ala
225          230          235          240
Leu Arg Gly Lys Cys Asn Ile Leu His Phe Ser Asp Ile
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<210> 4279

<211> 1963

<212> DNA

<213> Homo sapiens

<400> 4279

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120
gcaatggccc tgagagacac cgaggacaag ctacgtcggc gcccgaagag gaggaaggac
180
atccttgacag agttgaccaa gagccagaag gttttctcag aaaagctgga ccacctgagc
240
cgccgtcttg cctgggtcca tgccactgtc tactcccagg agaagatgct ggacatctac
300
tggtgctgc gcgtctgcct gcggaccatt gagcacggtg atgcacaggt gtctctcttt
360
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420
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540
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cagcggccct gggcccagac caactggatc ctggtgcggc tctggagggg ctgtggcttc
720
gggtaccgct atacacggct gccacatctg ctgaaaacca aacttgagga cgccaatttg
780
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840
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900
gccttctctg aattcattgg catgatccaa gagatccagc aggctgctga gcgcctggag
960
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1020
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1080
accggccta cctctgagat gctgctgcgg cgtcttgac agctgctaaa ccagggtgctg
1140
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1200
ctagagagcg tggaccacta tcccattctg gtggcagtga cgggcatcct ggtgcagctc
1260
ctggtgcgtg gccagcctc agagagagag caagccacat cagtgtcctt ggcagatccc
1320
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 1620
 cagcacctga tgaacaacaa ggactgcttc ttctgcaaaa ccaccatcgt gtctgtagag
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 1800
 ccctttgccc ttctcctgta tcccacacca ccacatccaa cctccttgcc tgcctgtatc
 1860
 ctcattgggtg ggagcccagc catggcccta attgtgcctg agcttgactt tcagtcaggg
 1920
 ccacagttag cattaaatta ttattccata caaaaaaaaaaaa aaa
 1963

<210> 4280

<211> 575

<212> PRT

<213> Homo sapiens

<400> 4280

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Met	Met	Tyr	Ser	Leu	Ser	Val	His	Gln	Gln	Leu	Gly	Lys	Met	Val	Gly
			20					25					30		
Val	Ser	Asp	Asp	Val	Asn	Glu	Tyr	Ala	Met	Ala	Leu	Arg	Asp	Thr	Glu
		35					40					45			
Asp	Lys	Leu	Arg	Arg	Cys	Pro	Lys	Arg	Arg	Lys	Asp	Ile	Leu	Ala	Glu
	50					55					60				
Leu	Thr	Lys	Ser	Gln	Lys	Val	Phe	Ser	Glu	Lys	Leu	Asp	His	Leu	Ser
65					70					75				80	
Arg	Arg	Leu	Ala	Trp	Val	His	Ala	Thr	Val	Tyr	Ser	Gln	Glu	Lys	Met
				85					90					95	
Leu	Asp	Ile	Tyr	Trp	Leu	Leu	Arg	Val	Cys	Leu	Arg	Thr	Ile	Glu	His
			100					105					110		
Gly	Asp	Arg	Thr	Gly	Ser	Leu	Phe	Ala	Phe	Met	Pro	Glu	Phe	Tyr	Leu
		115					120					125			
Ser	Val	Ala	Ile	Asn	Ser	Tyr	Ser	Ala	Leu	Lys	Asn	Tyr	Phe	Gly	Pro
		130				135					140				
Val	His	Ser	Met	Glu	Glu	Leu	Pro	Gly	Tyr	Glu	Glu	Thr	Leu	Thr	Arg
145					150					155				160	
Leu	Ala	Ala	Ile	Leu	Ala	Lys	His	Phe	Ala	Asp	Ala	Arg	Ile	Val	Gly
				165					170					175	
Thr	Asp	Ile	Arg	Asp	Ser	Leu	Met	Gln	Ala	Leu	Ala	Ser	Tyr	Val	Cys
			180					185					190		
Tyr	Pro	His	Ser	Leu	Arg	Ala	Val	Glu	Arg	Ile	Pro	Glu	Glu	Gln	Arg
		195				200						205			
Ile	Ala	Met	Val	Arg	Asn	Leu	Leu	Ala	Pro	Tyr	Glu	Gln	Arg	Pro	Trp
	210					215					220				
Ala	Gln	Thr	Asn	Trp	Ile	Leu	Val	Arg	Leu	Trp	Arg	Gly	Cys	Gly	Phe
225					230					235				240	
Gly	Tyr	Arg	Tyr	Thr	Arg	Leu	Pro	His	Leu	Leu	Lys	Thr	Lys	Leu	Glu

acgcgtgaag ggacagagct ggggccttgt caggagcccc acagttggcc aatggggccag
60
atgccccata gtctcagccc acctctcttc tgccatgagt cccctgattc tgtcctttga
120
gctgactctg agaggcagtg ggcttcccg cagcacctcc ccctatcaca tttgtagggc
180

tggtttatga ggccggaagt aagcaagcac cccctcatat caacctggca cttcacaccc
240
cccatgggta tcagtggggg tgctggctgg ctggcaggca gccagagaca tttcagcagg
300
tcaggcatgg atgcaggtgg aaatgagaga ggatcagtga gcgcattcat gtcttttgag
360
tggtctacag atgagtggtc tccagtctca aatgaggaga acaaataaggg aagtaggagc
420
tcagggttct tgtgtgtctc ataggcagct gcctatccct gggtgataca gctccctggc
480
acacccattc ccaagggcac aggatcc
507

<210> 4282
<211> 106
<212> PRT
<213> Homo sapiens

<400> 4282
Met Asn Ala Leu Thr Asp Pro Leu Ser Phe Pro Pro Ala Ser Met Pro
1 5 10 15
Asp Leu Leu Lys Cys Leu Trp Leu Pro Ala Ser Gln Pro Ala Pro Pro
20 25 30
Leu Ile Thr Met Gly Gly Val Lys Cys Gln Val Asp Met Arg Gly Cys
35 40 45
Leu Leu Thr Ser Gly Leu Ile Asn Gln Pro Tyr Lys Cys Asp Arg Gly
50 55 60
Arg Cys Trp Arg Glu Ala His Cys Leu Ser Glu Ser Ala Gln Arg Thr
65 70 75 80
Glu Ser Gly Asp Ser Trp Gln Lys Arg Gly Gly Leu Arg Leu Trp Gly
85 90 95
Ile Trp Pro Ile Gly Gln Leu Trp Gly Ser
100 105

<210> 4283
<211> 315
<212> DNA
<213> Homo sapiens

<400> 4283
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cgaccgtttt cctagaaggc ctaaccgctc aaacggggcag gggagggggg cgggcggccc
120
gggagaaacc gagtccccgc cgggtcccca ccgtgtggcg ccgaccgaaa taactccagt
180
ccagctgcaa aaaccctccc gaaaacccaa gcttgtccgg cacaacttcg gtctctccag
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cctcattcct gcccgactc cgccaaactg ctcgccctgc ccagcgcagc ggatgcagcg
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ctcccgggcc nacgg
315

<210> 4284

<211> 91
 <212> PRT
 <213> Homo sapiens

<400> 4284
 Met Gly Cys Pro Ser Ala Ala Asp Arg Phe Pro Arg Arg Pro Asn Arg
 1 5 10 15
 Ser Asn Gly Gln Gly Arg Gly Ala Gly Gly Pro Gly Glu Thr Glu Ser
 20 25 30
 Pro Pro Gly Pro His Arg Val Ala Pro Thr Glu Ile Thr Pro Val Gln
 35 40 45
 Leu Gln Lys Pro Ser Arg Lys Pro Lys Leu Val Arg His Asn Phe Gly
 50 55 60
 Leu Ser Ser Leu Ile Pro Ala Arg Thr Pro Pro Asn Cys Ser Pro Cys
 65 70 75 80
 Pro Ala Gln Arg Met Gln Arg Ser Arg Pro Xaa
 85 90

<210> 4285
 <211> 591
 <212> DNA
 <213> Homo sapiens

<400> 4285
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 aaaatcctga ccaagatgaa gcagcagggt catgagacag ccgcctgtcc ggagactgaa
 120
 gagataccgc agggagccag tggctgctgg aaggatgacc tccagaagga actgagtgat
 180
 atatggtgat gcccagcctg cagtctgacc cctgaccctc ctctgaaccc gttcccccaa
 240
 cgggatctgg cagtgaccac cagaacctgg agcccacctg agtccagact tccctcaccc
 300
 cctaggactc accccaccac ggcccccaac cttagctgta ctgctgtcta caccctgagc
 360
 agtgtggagt ctcccagegc ccccagctcc ttgtcttctt gcaggtctgc tgtgcacgtg
 420
 ctgcaggact ccatagacag cctcactttg tgctcggggg cctgtcccaa ggcctcgagc
 480
 ctaagaggcc acaagggcac cagtgcctga gccctccact cccctcctgg gactctgact
 540
 ccgactgtga ccaggacctc tcccagccac ctttcagcaa gagcggccgc a
 591

<210> 4286
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 4286
 Cys Pro Ala Cys Ser Leu Thr Pro Asp Pro Pro Leu Asn Pro Phe Pro
 1 5 10 15
 Gln Arg Asp Leu Ala Val Thr Thr Arg Thr Trp Ser Pro Pro Glu Ser

			20					25				30					
Arg	Leu	Pro	Ser	Pro	Pro	Arg	Thr	His	Pro	Thr	Thr	Ala	Pro	Asn	Leu		
		35					40					45					
Ser	Cys	Thr	Ala	Val	Tyr	Thr	Leu	Ser	Ser	Val	Glu	Ser	Pro	Ser	Ala		
	50					55					60						
Pro	Ser	Ser	Leu	Ser	Ser	Cys	Arg	Ser	Ala	Val	His	Val	Leu	Gln	Asp		
65					70					75					80		
Ser	Ile	Asp	Ser	Leu	Thr	Leu	Cys	Ser	Gly	Ala	Cys	Pro	Lys	Ala	Ser		
			85					90						95			
Ser	Leu	Arg	Gly	His	Lys	Gly	Thr	Ser	Ala								
			100					105									

<210> 4287

<211> 868

<212> DNA

<213> Homo sapiens

<400> 4287

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 120
 cggaaagcta cagtgttgaa gacatggatg agggtagcga cgaagtcggg gaggaagaga
 180
 tgggtgaagg caacgactat gaagaattcg gtgcgttttg tggctatggc accctcacca
 240
 gctttgacat ccatatcctc agagccttcg gaagcttggg tccaggcctt cgcattctat
 300
 cgaatgagcc ctgggaactg gaaaaccnct gtgctggccc agaccctggt ggaggcattg
 360
 cagctggatc cggaaacact tgccaatgag acggccgccc gtgctgcca cgtagcccgc
 420
 gccgcccct ccaaccgtgc ggctcgggce gctgccgccc ctgcccgtac cgccttcagt
 480
 caggtggtcg ctagccaccg ggtggccacg ccgcaggtct caggagagga taccagccc
 540
 acgacctacg ccgcccaggc tcaggggccc acccctgagc cacccttgc ttctccgcag
 600
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 660
 cagtcccaga caggctcccc ggcccaggag gctgctactg agggccctag tagcgctgt
 720
 gcattctctc aggtccgtg tgccaggag gtggacgcca accggcccag cacagccttc
 780
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 840
 gcgcccaga gacctgccc gccaaagag
 868

<210> 4288

<211> 240

<212> PRT

<213> Homo sapiens

<400> 4288

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Met Arg Val Ala Thr Lys Ser Gly Arg Lys Arg Trp Leu Lys Ala Thr
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Thr Met Lys Asn Ser Val Arg Leu Val Ala Met Ala Pro Ser Pro Ala
          20           25           30
Leu Thr Ser Ile Ser Ser Glu Pro Ser Glu Ala Trp Val Gln Ala Phe
          35           40           45
Ala Ser Tyr Arg Met Ser Pro Gly Asn Trp Lys Thr Xaa Val Leu Ala
          50           55           60
Gln Thr Leu Val Glu Ala Leu Gln Leu Asp Pro Glu Thr Leu Ala Asn
65           70           75           80
Glu Thr Ala Ala Arg Ala Ala Asn Val Ala Arg Ala Ala Ala Ser Asn
          85           90           95
Arg Ala Ala Arg Ala Ala Ala Ala Ala Ala Arg Thr Ala Phe Ser Gln
          100          105          110
Val Val Ala Ser His Arg Val Ala Thr Pro Gln Val Ser Gly Glu Asp
          115          120          125
Thr Gln Pro Thr Thr Tyr Ala Ala Glu Ala Gln Gly Pro Thr Pro Glu
          130          135          140
Pro Pro Leu Ala Ser Pro Gln Thr Ser Gln Met Leu Val Thr Ser Lys
145          150          155          160
Met Ala Ala Pro Glu Ala Pro Ala Thr Ser Ala Gln Ser Gln Thr Gly
          165          170          175
Ser Pro Ala Gln Glu Ala Ala Thr Glu Gly Pro Ser Ser Ala Cys Ala
          180          185          190
Phe Ser Gln Ala Pro Cys Ala Arg Glu Val Asp Ala Asn Arg Pro Ser
          195          200          205
Thr Ala Phe Leu Gly Gln Asn Asp Val Phe Asp Phe Thr Gln Pro Ala
          210          215          220
Val Ser Val Ala Trp Leu Pro Ala Pro Lys Arg Pro Ala Gln Pro Arg
225          230          235          240

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<210> 4289

<211> 353

<212> DNA

<213> Homo sapiens

<400> 4289

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120
caaagagcct tttgggaaca gttttcttat tgaaacatac tcagtgttta aacctgcagg
180
tgtgggttgg tggcagtcca catggcatcc tttgctctgt ccctgttctc ctgtctctgg
240
ctattcaggt tcccgtgagg atactgtcac ccttgaataa tggagcttgc ggaagaccaa
300
gccctgttt ttggagtcct tgtgctgagg ccgctgtaac ttgcggagag ttg
353

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<210> 4290

<211> 113

<212> PRT

<213> Homo sapiens

<400> 4290

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Met Thr Thr Leu Pro Val Arg Asp Met Arg Glu Lys Tyr Gly Ser Leu
 1           5           10          15
Leu Thr Ser Gly Val Thr Ala Gln His Ile Ser Arg Leu Cys Phe His
   20          25          30
Ile Gly Leu Ala Lys Ser Leu Leu Gly Thr Val Phe Leu Leu Lys His
   35          40          45
Thr Gln Cys Leu Asn Leu Gln Val Trp Val Gly Gly Ser Pro His Gly
   50          55          60
Ile Leu Cys Ser Val Pro Val Leu Leu Ser Leu Ala Ile Gln Val Pro
 65          70          75          80
Val Arg Ile Leu Ser Pro Leu Asn Asn Gly Ala Cys Gly Arg Pro Ser
   85          90          95
Pro Cys Phe Trp Ser Pro Cys Ala Glu Ala Ala Val Thr Cys Gly Glu
   100         105         110
Leu

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<210> 4291

<211> 517

<212> DNA

<213> Homo sapiens

<400> 4291

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nnaaatttgc caagccaaga gttaccccag gaagattctc tcttacatgg ccaattttca
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caagcagtca ctcccctagc ccatcatcac acagattatt caaagcccac cgatatctca
120
tgagagaca cactttctca gaagtttgga tcctcagatc acttgagaaa actatttaag
180
atggatgaag caagtgccca gctccttgct tataaggaaa aaggccattc tcagagttca
240
caattttcct ctgatcaaga aatagctcat ctgctgcctg aaaatgtgag tgcgctccca
300
gctacggtgg cagttgcttc tccacatacc acctcggeta ctccaaagcc cgccaccctt
360
ctaccacca atgcttcagt gacaccttct gggacttccc agccacagct ggccaccaca
420
gctccacctg taaccactgt cactttctcag cctcccacga ccctcatttc tacagttttt
480
acacgggctg tggctacact ccaagcaatg gctacaa
517

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<210> 4292

<211> 172

<212> PRT

<213> Homo sapiens

<400> 4292

```

Xaa Asn Leu Pro Ser Gln Glu Leu Pro Gln Glu Asp Ser Leu Leu His
 1           5           10          15
Gly Gln Phe Ser Gln Ala Val Thr Pro Leu Ala His His His Thr Asp

```



```

      1           5           10           15
Ile Ala Val Glu Glu Thr Asp Val His Gly Lys His Gln Gly Ser Gly
      20           25           30
Lys Trp Gln Lys Met Glu Lys Pro Tyr Ala Phe Thr Val His Cys Val
      35           40           45
Lys Arg Ala Arg Arg His Arg Trp Lys Trp Ala Gln Val Thr Phe Trp
      50           55           60
Cys Pro Glu Glu Gln Leu Cys His Leu Trp Leu Gln Thr Leu Arg Glu
      65           70           75           80
Met Leu Glu Lys Leu Thr Ser Arg Pro Lys His Leu Leu Val Phe Ile
      85           90           95
Asn Pro Phe Gly Gly Lys Gly Gln Gly Lys Arg Ile Tyr Glu Arg Lys
      100          105          110
Val Ala Pro Leu Phe Thr Leu Ala Ser Ile Thr Thr Asp Ile Ile Val
      115          120          125
Thr Glu His Ala Asn Gln Ala Lys Glu Thr Leu Tyr Glu Ile Asn Ile
      130          135          140
Asp Lys Tyr Asp Gly Ile Val Cys Val Gly Gly Asp Gly Met Phe Ser
      145          150          155          160
Glu Val Leu His Gly Leu Ile Gly Arg Thr Gln Arg Ser Ala Gly Val
      165          170          175
Asp Gln Asn His Pro Arg
      180

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<210> 4295

<211> 431

<212> DNA

<213> Homo sapiens

<400> 4295

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nntctagaaa atcactgtct ccttctaccc tgccatctct acaccagggt tacaacaag
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agcccaactgc tggctccttg ttttgtaa at aagatttggt ggactacagc tatgcccgt
120
catgtacatt ttgtgtatgg ctgcttttgt gccacaacag cagggttgag tattgcgaca
180
gagaccccca ttgccacaaa gcctaaaaca tttgccatcg agccctttaa gaaagagttt
240
gctggccgtg cgcggtggcc gtggctcccc cctgtaatcc cagcactttg gaaggctgag
300
gcaggcgggtg aggtctggag ttcgaaacca gcctggccag cgtggcgaaa ccctgtctcc
360
ccctcccaga ttacgtgat tatccacct cagcctcctg agtacctggg actataggcg
420
cgtgccaacc a
431

```

<210> 4296

<211> 138

<212> PRT

<213> Homo sapiens

<400> 4296

```

Xaa Leu Glu Asn His Cys Leu Leu Leu Pro Cys His Leu Tyr Thr Arg

```

1	5	10	15
Val Thr Asn Lys Ser Pro Leu Leu Ala Pro Cys Phe Val Asn Lys Ile			
20	25	30	
Cys Trp Thr Thr Ala Met Pro Val His Val His Phe Val Tyr Gly Cys			
35	40	45	
Phe Cys Ala Thr Thr Ala Gly Leu Ser Ile Ala Thr Glu Thr Pro Ile			
50	55	60	
Ala His Lys Pro Lys Thr Phe Ala Ile Glu Pro Phe Lys Lys Glu Phe			
65	70	75	80
Ala Gly Arg Ala Arg Trp Pro Trp Leu Pro Pro Val Ile Pro Ala Leu			
85	90	95	
Trp Lys Ala Glu Ala Gly Gly Glu Val Trp Ser Ser Lys Pro Ala Trp			
100	105	110	
Pro Ala Trp Arg Asn Pro Val Ser Pro Ser Gln Ile His Val Ile Ile			
115	120	125	
Pro Pro Gln Pro Pro Glu Tyr Leu Gly Leu			
130	135		

<210> 4297

<211> 1668

<212> DNA

<213> Homo sapiens

<400> 4297

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nccatggact cggcctttgt gggataaaag gtcaaccaag tgtcagctgc agttggaaaa
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gatttcaccg tgattccatc taaactgatt cagtttgacc caggaatgtc aactaagatg
120
tggaatatag caattaccta tgacggatta gaggaagatg atgaggtctt tgaagtaatt
180
ctgaactccc ctgtgaatgc agttcttggc acaaagacaa aagctgcagt gaaaattttg
240
gactcaaaag gaggacaatg ccatecttca tattectcca accaaagcaa gcacagcaca
300
tgggagaagg gcatttggca tctgctgccc ccaggggtctt cctcatccac cacttctggt
360
tcctttcatc tggaaagaag acctcttcca tcttccatgc agctagcagt catcagggga
420
gacaccctgc ggggctttga ttctacagat ctttctcaaa ggaagcttag gacccgtggg
480
aatggcaaaa cagttcgtcc atcctctggt tatagaaatg gaacagacat catctataat
540
tatcatggga tagtttcctt gaaactggag gatgacagtt tcccaactca caaaaggaag
600
gccaaagtat ccatcattag tcagccacaa aagacaatca aagtggcaga actgcctcaa
660
gcagataagg tggaatccac aactgactca cacttcccca gacaggacca gttgccctca
720
tttccaaaga actgcactct ggaattaaag ggactcttcc attttgaaga aggcattccag
780
aagctgtatc agtgcaatgg gatcgcttgg aaagcctgga gtccccaac caaggatgtg
840
gaagacaaat cctgtccagc cgggtggcac cagcactcag gctactgtca catcttgatc
900

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acagagcaga aaggcacctg gaatgcggct gcccaagctt gcaggggaaca atacctgggc
 960
 aaccttgtaa ctgtattctc caggcagcac atgcgggtggc tctgggacat tgggtgggaga
 1020
 aagtcctttt ggataggttt gaacgaccaa gtgcatgctg gccactggga gtggatcggt
 1080
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 1140
 aagagctgtg ttttggttca aagacaaggg aaatggcaaa caaaagactg taggagagcc
 1200
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 1260
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 1320
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 1440
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 1500
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 1560
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 1620
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 1668

<210> 4298

<211> 411

<212> PRT

<213> Homo sapiens

<400> 4298

Xaa	Met	Asp	Ser	Ala	Phe	Val	Gly	Ile	Lys	Val	Asn	Gln	Val	Ser	Ala
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Ala	Val	Gly	Lys	Asp	Phe	Thr	Val	Ile	Pro	Ser	Lys	Leu	Ile	Gln	Phe
		20						25					30		
Asp	Pro	Gly	Met	Ser	Thr	Lys	Met	Trp	Asn	Ile	Ala	Ile	Thr	Tyr	Asp
		35					40					45			
Gly	Leu	Glu	Glu	Asp	Asp	Glu	Val	Phe	Glu	Val	Ile	Leu	Asn	Ser	Pro
	50					55					60				
Val	Asn	Ala	Val	Leu	Gly	Thr	Lys	Thr	Lys	Ala	Ala	Val	Lys	Ile	Leu
65				70					75					80	
Asp	Ser	Lys	Gly	Gly	Gln	Cys	His	Pro	Ser	Tyr	Ser	Ser	Asn	Gln	Ser
			85					90					95		
Lys	His	Ser	Thr	Trp	Glu	Lys	Gly	Ile	Trp	His	Leu	Leu	Pro	Pro	Gly
			100					105					110		
Ser	Ser	Ser	Ser	Thr	Thr	Ser	Gly	Ser	Phe	His	Leu	Glu	Arg	Arg	Pro
			115				120					125			
Leu	Pro	Ser	Ser	Met	Gln	Leu	Ala	Val	Ile	Arg	Gly	Asp	Thr	Leu	Arg
	130					135					140				
Gly	Phe	Asp	Ser	Thr	Asp	Leu	Ser	Gln	Arg	Lys	Leu	Arg	Thr	Arg	Gly
145				150				155						160	
Asn	Gly	Lys	Thr	Val	Arg	Pro	Ser	Ser	Val	Tyr	Arg	Asn	Gly	Thr	Asp

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<400> 4299
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120
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180
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240
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480
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gctgcaggca gcgagtggg cgggcccgc gcatctctc actgtcacgc agggctctct
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 600
 cccacttggtg ctctctcttc tctccatggc ggctgtggg gctcagcacc tcttcaagct
 660
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 720
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 780
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 840
 tgggtctcaa gggcttcaca taccacctgt tcatgctctn cccatcaggg accacgaagc
 900
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 960
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 988

<210> 4300
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 4300
 Gly Cys Leu Trp Ser Ser Ala Ala Arg Ala Gln Gln Thr Ile Tyr His
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 Ser Val Pro Ser Gly Gly His Pro Ser Ser Ser His Trp Leu Pro Ala
 20 25 30
 Val Ser Leu Gln Ser Pro Asp Arg Arg Leu Ser His Asp Pro Ala Ala
 35 40 45
 Ser Ser Trp Ser Gly Phe Cys Gly Ile Ser Pro Ala Phe Ser Ala Phe
 50 55 60
 Ser Glu Cys Ser Pro Ser Ser Leu Arg Ser His Pro Pro Ala Leu Gly
 65 70 75 80
 Ala Ser Asp Arg

<210> 4301
 <211> 2429
 <212> DNA
 <213> Homo sapiens

<400> 4301
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 120
 cagggccaga gcggggcagg aggatgcttt cccagcccca ccatggagct gcgctgtggg
 180
 ggattgctgt tcagttctcg ctttgattca gggaatctag cccacgtgga gaaggtggaa
 240
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 300

gcctcttccc ctgactatga attcaacgtg tggaccogac cagactgtgc tgaaacggaa
360
tttgagaatg ggaacaggte atggttctac ttcagcgtcc ggggaggaat gccaggaaaa
420
ctcatcaaga tcaacattat gaacatgaac aagcagagca agctgtattc ccagggcatg
480
gccccctttg tgcgcacact gcccaccggt ccacgctggg aacgcattcg agaccggccc
540
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600
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660
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780
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840
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900
ttaagcagta gagtacaccc aggggagact ccatctagct ttgtcttcaa tggctttctg
960
gacttcatcc tccgacctga tgatccccgg gcccaaacc tccgtcgcct cttegtcttt
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1080
cgtggagtga atctgaaccg tcagtacctg aagcctgatg ccgtcctgca cccggccatc
1140
tatggggcca aagctgtgct tctctaccac catgtgcact ctcgtctgaa ctcccagagt
1200
tcctctgagc accagcccag ttctgtctc cctcctgatg ctctgtttc tgacctggag
1260
aaagccaaca atctccaaaa tgaagctcag tgtgggcact cagctgacag gcataacgt
1320
gaagcctgga aacaaacaga gccagcagaa cagaagctca acagtgtgtg gattatgcca
1380
caacagtctg cggggcttga agagtcagcc cctgatacca tccccccaa agagagtggc
1440
gttgcttact atgtggacct gcatggacat gcttccaaaa ggggctgctt catgtacgga
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aacagcttta gtgatgagag caccaggtg gaaaacatgc tatatccaaa gctcatctcc
1560
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